A Pill for the Ill?

Depression, Medicalization and Public Health

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Depression, Medicalization and Public Health

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Abstract**:**

Mental disorders, especially depression, have been increasingly described as a growing burden to global public health. Critics argue, however, that the use of mental health surveys, underlying these descriptions, tends to overestimate the prevalence of mental disorders by not distinguishing everyday experiences of distress from pathological conditions. This medicalization of public health is believed to narrow the focus of public health practices. The aim of this thesis is twofold. The first objective is to describe and analyze experiences with antidepressant treatment for depression as expressed in adverse drug reaction (ADR) reports from patients, i.e. "consumers reports." A second goal is to conduct a theoretical discussion, by looking at broad societal changes, and analyzing the consequences of mental ill health as a significant public health problem. Special attention will be given to medicalization. Reports of suspected adverse reactions regarding antidepressant mediations were submitted from 2002 to 2009 to an open Internet-based reporting system in Sweden. These were analyzed according to common psychiatric reactions and narrative experiences. Furthermore, a literature overview in a broad and general sense was performed to underpin a theoretical discussion on health, public health, mental ill health and medicalization. The main findings of this thesis were that patients reporting to an open Internet-based system in Sweden seemed, to a large extent, to experience psychiatric ADR symptoms of mental disturbances (sometimes severe), which affected them in many different ways, especially during discontinuation. These reports also suggested a negative doctor-patient interaction from the patient's perspective. Risks leading to increased medicalization as a result of overdiagnoses of depression were found. Pharmaceuticalization resulting from overprescribed antidepressants was also deemed problematic. According to a theoretical discussion on public health and medicalization, increased medicalization as a result of excessive diagnosing risks individualizing mental problems and may divert the focus from the social and political context of public health. According to patient reports, there seems to be a potential problem as to how patients are diagnosed with depression and prescribed antidepressant medication in the medical encounter. Increased drug treatment risks lead to increased health care costs and potential harm from adverse drug reactions. Overdiagnosis and overtreatment may in turn lead to diminished trust in the health system. If depression is going to be viewed as a growing public health problem, it, therefore, calls for a distinction between ill health problems that are medical and those that are not. Arguments for increased medication must be related to a possible danger of medicalizing social problems and life crises.

Key words: Adverse drug reaction; Antidepressants; Consumer reporting; Depression; Medical encounter; Mental health; Public health; Medicalization; Pharmaceuticalization

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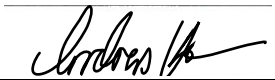
Signature  Date 2014/01/23

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Abstract

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The aim of this thesis is twofold. The first objective is to describe and analyze experiences with antidepressant treatment for depression as expressed in adverse drug reaction (ADR) reports from patients, i.e. "consumers reports." A second goal is to conduct a theoretical discussion, by looking at broad societal changes, and analyzing the consequences of mental ill health as a significant public health problem. Special attention will be given to medicalization.

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In memory of my father

It is an art of no little importance to administer medicines properly,
but it is an art of much greater and more difficult acquisition
to know when to suspend or altogether to omit them

Philippe Pinel - French physician (1745-1826)

Contents

Abbreviations and acronyms

ADR	Adverse Drug Reaction
ATC	Anatomical Therapeutic Chemical classification system
CBT	Cognitive Behavioral Therapy
CDC	Center for Disease Control and Prevention
DALY	Disability-Adjusted Life Year
DDD	Defined Daily Doses
DPR	Direct Patient Reporting
DSM	Diagnostic and Statistical Manual of Mental Disorders
DTC	Direct-to-Consumer
FADR	Fatal Adverse Drug Reaction
FASS	Swedish Physicians' Desk Reference
FDA	Food and Drug Administration
HCP	Health Care Professionals
ICD	International Classifications of Diseases
MDD	Major Depressive Disorder
MedDRA	Medical Dictionary for Regulatory Activities
MPA	Medical Products Agency
NOMESCO	Nordic Medico-Statistical Committee
OECD	The Organisation for Economic Co-operation and Development
PIL	Patient Information Leaflet
PMDD	Premenstrual Dysphoric Disorder

PTSD	Post-Traumatic Stress Disorder
PV	Pharmacovigilance
SAD	Social Anxiety Disorder
SBU	Swedish Council on Health Technology Assessment
SNRI	Serotonin-Norepinephrine Reuptake Inhibitor
SPC	Summary of Product Characteristics
SSRI	Selective Serotonin-Reuptake Inhibitor
TCA	Tricyclic Antidepressant
WHO	World Health Organization

List of publications

This thesis is based on the following papers referred to in the text by their Roman numerals. The papers are appended at the end of the thesis.

I. Vilhelmsson A, Svensson T, Meeuwisse A, Carlsten A. What can we learn from consumer reports on psychiatric adverse drug reactions with antidepressant medication? Experiences from reports to a consumer association. BMC Clinical Pharmacology 2011; 11:16.

II. Vilhelmsson A, Svensson T, Meeuwisse A, Carlsten A. Experiences from consumer reports on psychiatric adverse drug reactions with antidepressant medication: a qualitative study of reports to a consumer association. BMC Pharmacology and Toxicology 2012; 13:19.

III. Vilhelmsson A, Svensson T, Meeuwisse A. A pill for the ill? Patients' reports of their experience of the medical encounter in the treatment of depression. PLoS ONE 2013; 8(6):e66338.

IV. Vilhelmsson A, Svensson T, Meeuwisse A. Mental ill health, public health and medicalization. Public Health Ethics 2011; 4(3):207-217.

Background

Mental disorders have been increasingly portrayed by the World Health Organization (WHO) and health researchers as a growing burden to global public health [1-5]. This description is, however, not without controversy, and some scholars are skeptical of how, for instance, depression is viewed as an increasing widespread ill health problem [6-12]. The purpose of this thesis is to contribute to the exploration of this issue by using some aspects of medicalization theory as a frame of reference when analyzing reports of psychiatric adverse drug reactions with antidepressant medication. This thesis will also focus on theoretical discussions of what it means that mental ill health is a great public health problem. This will be elaborated further in the text.

Depression: A rapidly growing public health problem

The economic impact of mental disorders is significant; it is expected to cost almost a third of the projected US$47 trillion (approximately €37 trillion) incurred by all non-communicable diseases by 2030 [13]. American and European research indicated in 2005 that 26-27% of the adult population suffers from a diagnosable mental disorder, representing over 57 million Americans and almost 83 million Europeans [14-15]. The European research was later revised in 2011 to 38% (approximately 160 million Europeans) by including mental diagnoses usually not analyzed in these kinds of studies, such as insomnia and alcoholism [16]. In Sweden as well as other countries, milder mental symptoms are now being frequently reported as common occurrences [17-18], especially among youth and the elderly [19-20]. These

milder symptoms are increasingly becoming highlighted as important; research (for example, Swedish and American) have suggested that early mental ill health can predict more severe mental illness and mental disorders (such as major depression) later in life [21-23] and even premature death [24]. It is, therefore, often argued that early signs of mental ill health need to be acknowledged and treated to prevent the onset of mental disorders [21-23, 25-28].

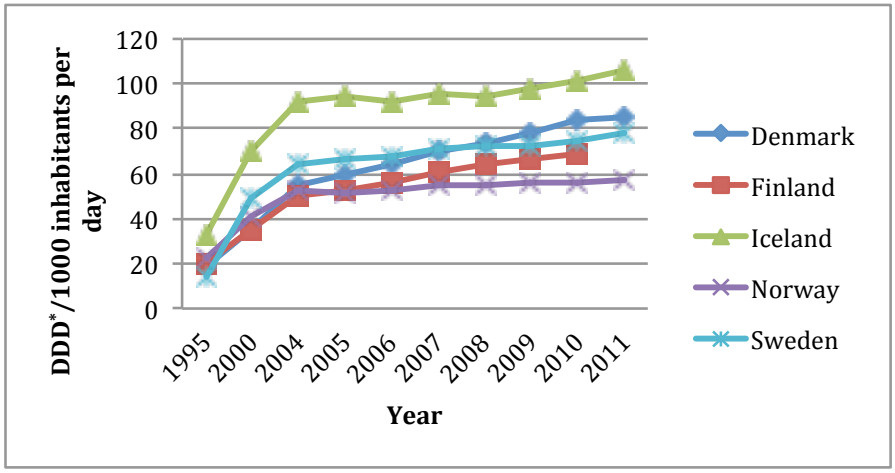
Depression is the most common of the affective disorders, which are defined as disorders of mood rather than disturbances of thought or cognition [29]. These disorders are believed to result from a complex interaction of social, psychological and biological factors [30]. Depression is the psychiatric disorder most frequently linked to stress, and research indicates that stressful events and difficulties make it more likely [31]. The disorder differs from usual mood fluctuations and short-lived emotional responses to challenges in everyday life, and can, when long-lasting and with moderate or severe intensity, become a serious health condition [30]. Depression is estimated to have a point prevalence of about 5% in the general population, and a lifetime risk of about 15% [32] with an explicit gender impact affecting women with an almost 2:1 ratio [15, 33-35]. More than 350 million people of all ages are believed to suffer from depression [30], and it is suggested that there has been a 37% increase in global disability-adjusted life years (DALYs) since 1990 [36]. In Europe a yearly prevalence of 6.9% of depression is estimated to affect 30.3 million inhabitants in the European Union [16].

Overall, the WHO now ranks depression as one of the most burdensome diseases in the world, and the organization has for some time projected and warned that depression is predicted to be the highest-ranking disease problem in the developed world by 2020 [1-2]. The demand for curbing depression and other mental health problems is globally on the rise, and in 2012 the World Health Assembly called on the WHO and its member states to take action in this direction [37]. This progress has also affected mental health policies in Europe that in recent years have been driven by two key documents: the Mental Health Declaration [38] and the European Commission Green Paper [39] with the purpose of preventing depression and promoting mental health in member states.

The Nordic context

In 2005, all the Nordic countries signed the WHO Helsinki Mental Health Declaration for Europe and the Mental Health Action Plan for Europe [40]. The prevalence of depression in the Nordic countries varies between 3.5-5% [41-45]. There is, however, a significant difference in the use of antidepressant among the Nordic countries. As Figure 1 indicates (and previously indicated by NOMESCO reports [46-47]), sales of antidepressants in all the Nordic countries have increased as much as fourfold since the middle of the 1990s. The overall consumption of antidepressant drugs in the Nordic countries in 2009 (74.1 DDD/1000 inhabitants per day) was considerably higher than the OECD average (52.5), but also higher than, for instance, in the UK (60.9) [48]. As indicated in Figure 1, sales of antidepressants vary among the Nordic countries, where Iceland by far has the highest level, almost double that of Norway. These differences among the Nordic countries have also been shown in the use of psychotropic medication for ADHD, where Iceland also had the most widespread use [49].

Figure 1 Sales of antidepressants (N06A) in the Nordic Countries 1995-2011 in DDD*/1000 inhabitants per day [46-47, 50-54]
* Defined Daily Doses according to WHO classification



As Table 1 shows, almost 2 million Nordic inhabitants are annually prescribed an antidepressant, roughly 8.5% of the Nordic population, and at a total cost of €236 million, according to the latest available statistics (ranging from 2010 to 2012). Several factors, such as drug accessibility, available treatment alternatives, clinical practices and national guidelines may influence patterns of prescribing and use of antidepressant drugs in the Nordic countries.

Table 1 Sales of antidepressants (N06A) and number of patients in the Nordic Countries [52-57]

Nation	Patients (N) in 1000 prescribed antidepressants	Patients (%) of total population	Sales in € million
Denmark	460	8.3	68
Finland	430	8.3	44
Iceland	35	11.2	4
Norway	300	6.3	50
Sweden	760	8.1	70
Total	1 985	8.44	236

An alternative interpretation

As previously mentioned, there are conflicting views regarding the officially proclaimed widespread existence of mental disorders, and depression in particular. For instance, according to some scholars, the increasing numbers of diagnoses of depression, and the ensuing prescriptions of antidepressants to treat it, instead reflect two concurrent phenomena: the "medicalization of distress" and a growing view that depression is primarily a "neurochemical disorder" that can be corrected with a drug [58]. It has also been claimed that antidepressants reflect one of the major manifestations of the medicalization of modern society [59]. Some critics argue that questions about mental illness symptoms in community surveys do not distinguish everyday experiences of distress in response to negative life events from genuinely pathological conditions [60]. Since most depressive symptoms are common (consider sadness, tiredness, apathy, insomnia, lowered concentration, and

appetite changes), depression will be reported as a widespread medical illness [61]. Thus, it has been argued that the use of community mental health surveys overestimates the prevalence of mental disorders and the associated societal and economic consequences [8, 12, 62-63]. Therefore, it is argued that estimates of the population prevalence of mental disorders should be approached with caution, as the methods often have shortcomings [11, 64].

One argument put forward concerns the astonishing numbers of afflicted people that are currently being reported. Depression and anxiety disorders were considered rare conditions only 20 years ago [65-66], and these numbers have grown enormously in the past 50 years. One can even speak of a thousandfold increase in the prevalence of depression [67]. Instead it is suggested that the change in prevalence is rather a consequence of expanding boundaries of mental illness, in part by changing professional and public discourses and perceptions [8, 61, 68-69]. This broadening of diagnostic criteria is argued to reflect medicalization as much as discovery of previously undetected sick people [12, 63, 70-74]. Non-medical problems have become medical ones.

This medicalization is believed to create a dependency on the medical profession with strong ties to the pharmaceutical industry [75-76] and account for the increasing burden of the rising costs in health care [77]. Pharmaceutical companies have also been accused of "disease mongering" [10, 78-79], whereby a "new condition" is promoted as a major public health problem in order to create a market for treatment, often without the public's knowledge [78]. This process is sometimes referred to as the "public healthification" of social problems [80]. Thus, some scholars claim that this medicalization of public health has resulted in a narrowing of the focus of public health practice [81]; too narrow of a perspective to be effective [80].

Public health

There is no single notion or concept of the term "health;" not a once and for all settled issue regarding its content and meaning. However, different meanings of health often tend to converge to basically two understandings: a negative and reductionist approach (health as the absence of disease [82-83],

and a positive, holistic approach (health as well-being [84], balance [85-86] or ability [87]. Where medicine focuses on individual health, public health is concerned with the health of the population [88]. Public health is a contested concept and is presented and used in a variety of ways by public health practitioners, researchers and commentators [89]. Despite what might be seen as an uncomplicated definition; i.e., the health of the public, there are several definitions of public health, referring to both content and application. To further complicate matters, public health is sometimes specified as public health science and/or public health work in order to differentiate between theory and practice, but this is not always the case. An American dictionary of public health, for example, separates the two and defines public health as:

> "An organized activity of society to promote, protect, improve, and, when necessary, restore the health of individuals, specified groups, or the entire population", while public health sciences is defined as: "A collective name for the scholarly activities that form the scientific base for public health practice, services, and systems" [77]: p. 307.

According to the WHO, the goal of public health is to fulfill every society's ambition to create conditions in which all people can be healthy [90]. This goal is in accordance with the commonly used notion of public health made by the leading public health figure C. -E. A. Winslow in 1920:

> "Public health is the science and art of preventing disease, prolonging life, and promoting physical health and efficiency through organized community efforts for the sanitation of the environment, the control of community infections, the education of the individual in principles of personal hygiene, the organization of medical and nursing service for the early diagnosis and preventive treatment of disease, and the development of the social machinery which will ensure to every individual in the community a standard of living adequate for the maintenance of health." [91]: p. 30.

In principle, two understandings of public health have persisted throughout history: a narrow medical focus and a broad focus on the underlying social and economic causes of health and disease [81, 92] as shown in Table 2. A narrow understanding of public health came to dominate when medical experts entered the field of public health during the era of bacteriology

beginning in the nineteenth century [93]. After the Second World War, the WHO was formally established as the international specialist agency for health within the United Nations [94] when all 26 member states ratified its constitution in 1948 [95]. The constitution stated that the objective was the highest possible level of health for all people. Additionally, the constitution stated that good health is a state of complete physical, social and mental well-being, and not merely the absence of disease or infirmity [84]. Despite this benevolent objective, the focus was more or less still disease-oriented. The first WHO conference to actually address the nature of health (instead of disease) was first held in Alma-Ata in 1978 and resulted in a charter that tried to overcome disease orientation by emphasizing primary health care and public involvement in decisions concerning health [96]. This "new public health" was identified in the subsequent WHO conference in Ottawa, which argued that in order to achieve their fullest health potential, people must be able to take control of those things which determine their health [97]. Since the 1980s, the focus of public health intervention has officially broadened towards population-level issues such as inequity, poverty and education and has moved away from advocating for change in the behavior of individuals [90]. However, scholars now increasingly argue that in practice, the WHO notion of health has been accepted as the absence of disease [98], and that most of the outcomes measured relate to individuals and not populations, despite rhetoric to the contrary [99]. The WHO definition has further been criticized to unintentionally contribute to the medicalization of society, since its requirement for complete health would determine that almost all of us are unhealthy [100].

Table 2 Two understandings of public health[1]

Characteristics	Broad	Narrow
Definition of health	Based on the WHO constitution	Absence of disease
Underlying theory	Socio-Structural	'Lifestyle'
Motivating concerns	Inequalities in health; Alleviating poverty to improve health, sustainable development	Individual risks of disease
Advantages	Potential long-term global benefits	Short-term benefits
Disadvantages	Risk of failure because of breadth of concerns	Failure to address fundamental threats to global health

Mental health and mental ill health

Terms such as mental health, mental ill health, mental health problem, mental disturbance, mental illness, mental disease, mental disability and mental disorder are being used today in attempts to cover different aspects of mental suffering. According to the WHO, mental health is to be regarded as an integral part of health in general and described as:

> "... a state of well-being in which the individual realizes his or her own abilities, 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." [101]: p. 2.

Mental ill health is often considered an umbrella term, which encompasses a continuum from the most severe disorders to a variety of common mental

[1] Modified after Beaglehole and Bonita [81]: p. 252

health problems and mild symptoms of varying intensity and duration [102] that cause personal suffering but would not always be given a psychiatric diagnosis [17]. Mental health problems include more common mental health complaints (such as anxiety and depression) of less severity and shorter duration than mental disorders [102] (often used interchangeably with mental illness [6]). There are frequent references in the literature to a biomedical model favored by many psychiatrists, in which mental disorders are seen as illnesses that comprise some form of bodily pathology [6]. This is an understanding of the meaning of health as the absence of disease. The biomedical approach is generally referred to as the model of modern medicine, or the "medical model." Proponents of this model often view disorders as having physiological/anatomical foundations and prescribe physiological/anatomical treatment [103]. Doctors and their patients often view ill health in different ways, and in recent years it has become customary among scholars to distinguish between "disease" and "illness." Disease is commonly understood as the professional objective perspective and illness the subjective layman perspective [75]. Disease is best applied to a physiological and/or psychological departure from normal function as contrasted to illness, which is the subjective state of the affected person often experienced in terms of symptoms [77].

Depression according to the DSM

Depression is usually diagnosed with either reference to the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) [104] issued by the American Psychiatric Association (APA) or the *International Classification of Diseases* (ICD) distributed by the WHO [105]. The ICD classifications have had more impact in Europe and elsewhere than in the US, although the two main classification systems have influenced each other. However, it is the DSM that for some time has been referred to as the "bible of psychiatry," since it now has a clear global scope that is not restricted to Western countries [6]. In Sweden the DSM is intended to be used only as a complement to the ICD, but it has gained increasing influence over the years.

The definition of a *major depressive episode* according to DSM-IV-TR requires that five symptoms out of nine be present during a two-week period. The five must include either depressed mood or loss of interest and pleasure): (1) depressed mood; (2) diminished interest of pleasure in activities; (3) weight gain or loss or change in appetite; (4) insomnia or hypersomnia (excessive sleep); (5) psychomotor agitation or retardation (slowing down); (6) fatigue or loss of energy; (7) feelings of worthlessness or excessive or inappropriate guilt; (8) diminished ability to think or concentrate, or indecisiveness; and (9) recurrent thoughts of death or suicidal ideation or suicide attempt [104]. An individual meeting these criteria in whole or partially (so called minor depression) is considered to have a depressive disorder. The symptoms will have to cause clinically significant distress or impairment for the individual and not meet the criteria for a so-called "mixed episode." Additionally, the symptoms must not be a result of physiological effects of a substance or not be accounted for by bereavement unless these symptoms persist for longer than two months or are characterized by marked functional impairment, morbid preoccupation with worthlessness, suicidal ideation, psychotic symptoms, or psychomotor retardation [104].

Criticisms of the DSM

The DSM manual is, however, not without controversy. Critics argue, for instance, that it reflects a growing tendency in our society to medicalize problems that are not medical and thus prevent understanding of phenomena by simply giving them a brand and code number [106]. The classification and measurement of mental disorder in terms of symptoms (without attention to the context) has been especially criticized for undermining the distinction between distress and disorder in psychiatric thinking [6] and conflating non-disordered people with the disordered [9]. It is, therefore, argued that the manual is misused to label as mentally ill people who are troubled but who probably have no mental disorder [106]. A further consideration of criticism often heard is the alleged financial ties between the members of the DSM panels and the pharmaceutical industry. Studies investigating these matters revealed that 57% of the members of the DSM-IV panel had financial ties to the industry [107], a number that increased to

69% when members of a DSM-5 panel later were investigated [108]. This has been seen for doctors responsible for clinical practical guidelines for other medical conditions as well [109], and disclosures of conflicts of interest seem to be rare [110]. This has further boosted criticism.

The newly published DSM-5 was immensely criticized several months before its release, for instance, by British psychiatrists and psychologists for medicalizing more of what people perceive as normal human behavior [111] and especially the proposed removal of the bereavement exclusion for major depressive disorder [112]. The overlap of symptoms between intense normal grief and depression are, therefore, believed to create a potential false positive problem in which depression that is part of normal bereavement may be misdiagnosed as clinical depression [74]. One front figure in these criticisms is the former chair in the DSM-IV task force, Allen Frances, who argues that the manual's proposal to promote early identification and treatment of mental disorders instead may lower already overdiagnosed thresholds (for instance for depression) and create false positives [72, 113]. He further suggests that because these changes all occur at the boundary between mental disorder and normality, they could create vast numbers of misdiagnosed new patients in an already over-inclusive contemporary psychiatry [72, 114].

Antidepressants – solution or problem?

Psychotropic drugs are defined as those that affect mood and behavior [29] and these drugs are commonly used in the treatment of depression. In the 1950s the tricyclic antidepressant (TCA) was developed and used for depression, but it was the new antidepressants, the selective serotonin-reuptake inhibitor (SSRI), that revolutionized the marketplace in the 1980s and later. Together with the serotonin-norepinephrine reuptake inhibitor (SNRI), these are often referred to as second-generation antidepressants [65, 115]. In comparison to older tricyclic antidepressants (TCA), SSRI has been judged to be equally effective in treating mild to moderate depression and to display a better safety profile [46, 116]; therefore, these drugs are prescribed more frequently [117]. The availability of antidepressants has also increased due to new indications and powerful marketing [46]. Since treatment with

SSRIs is more expensive than TCAs, expenditures for the treatment of depression have increased [46].

Global pharmaceutical sales have increased from $500 billion in 2003 (approximately €390 billion) to $856 billion (approximately €667 billion) in 2010 [118]. Antidepressants are currently ranked ninth among prescription drugs with global sales of over $20 billion (approximately €15 billion) [119]. According to the US Center for Disease Control and Prevention (CDC), the use of antidepressants in the United States among all ages from 1988-2008 increased nearly 400% [120]. The equivalent increase in Sweden was approximately 550% from 1995 to 2011 (see Figure 1) [46-47, 51]. Overall, prescriptions for antidepressants have risen, but this has been offset by a number of patent expiries and generic alternatives [121]. In the absence of therapeutics alternatives, the SSRIs are projected to continue to dominate the antidepressant market through 2018 and sales are expected to increase from $11.9 billion (approximately €9,3 billion) in 2011 to $13.4 billion (approximately €10,4 billion) [121]. Women are now 2½ times more likely to be taking an antidepressant than men [120].

The main biochemical theory of depression is the monoamine hypothesis, which states that depression is caused by a functional deficit of monoamine transmitters (for instance dopamine, serotonin and norepinephrine). This occurs at certain sites in the brain and grew originally out of associations between the clinical effects of various drugs that cause or alleviate symptoms of depression [29]. This hypothesis was introduced in the mid-1960s, with Joseph Schildkraut in 1965 [122] and Alec Coppen in 1967 [123] being particularly influential. It has had a considerable impact on the course taken by research in psychiatry, neuropharmacology, psychopharmacology, and neurochemistry [124]. As a result, depression was no longer seen as simply a natural response to stress; there was now an underlying biological factor, which was the cause [125]. Nevertheless, the understanding of a chemical imbalance has been disputed [59, 126-127], and it is argued that there is no scientifically established ideal of a chemical balance of serotonin, let alone an identifiable pathological imbalance [59]. One argument often put forward is that despite the fact that SSRIs produce immediate increases in monoamine transmission, their mood-enhancing properties require weeks of treatment [128].

Personal narratives of antidepressant use usually describe how the drug acts by restoring the person to the normal limits of function, behavior and

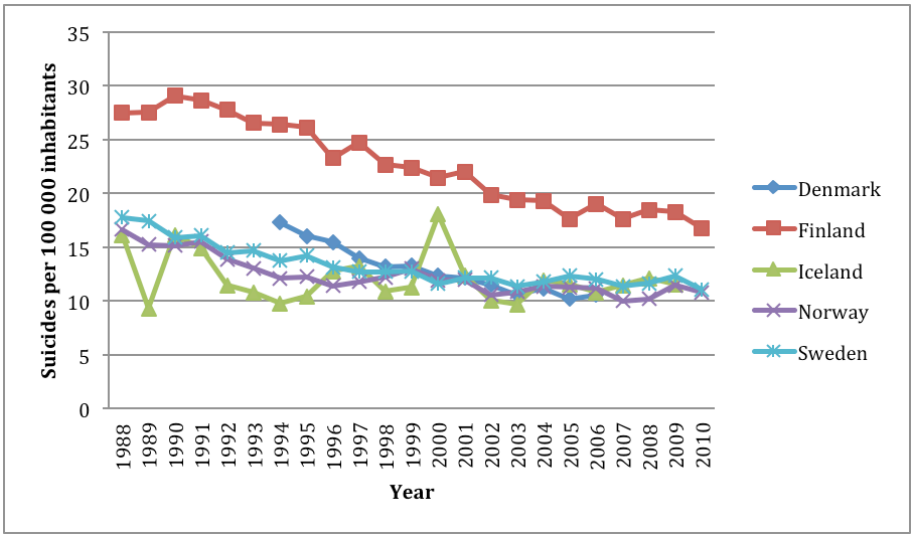
functionality [129]; patients experience that the antidepressant drug enables them to function in daily life activities [130]. In a qualitative UK-study, participants viewed antidepressants as either helping them in their own right or as a temporary solution while waiting for talking therapies [131]. The drug is often perceived as working by alleviating pain and suffering [132], by suppressing sensations and stopping the person from dwelling on symptoms [133]. This "blunting affect" can, however, also be perceived as something negative, where being-on-SSRIs for some patients meant an increased distance between takers and their worlds and where previously emotionally close individuals became no more important than anyone else [132].

Overall, about 15% of patients treated with a second-generation antidepressant are believed to discontinue treatments in randomized controlled trials because of intolerable adverse events [134], and, therefore, the efficacy of antidepressants is an arena of debate. Where some argue that their efficacy is supported by randomized controlled trials [135], others state that it is unlikely that there is a clinically important advantage for antidepressants over placebos in individuals with minor depression [126, 136-139]. This debate is not exclusive to antidepressant and depression; there is also an ongoing debate as to whether psychotherapy has a valuable place in modern mental health services [140-141]. Furthermore, the increase in antidepressant consumption has spurred an ongoing debate as to whether antidepressants are overprescribed [142] (medicalization) or underprescribed [143] (poor access to treatment). On the one hand, some Swedish research argue that antidepressants appear to be under-used in the population where the increased use of antidepressants in recent years is rational [144], but on the other hand, research has also shown that non-depressed individuals are being diagnosed with depression and prescribed antidepressants [145-148]. These conflicting matters are often actualized when it comes to questions about risk versus benefit of treatment because of potential harm from medicines.

Risk of adverse events

Pharmaceutical treatment is always accompanied by a risk of adverse events or reactions, often to an unknown extent, and increased pharmaceutical use raises this risk. The increased utilization of pharmaceuticals over the past several years has made the incidence of drug-related problems a common occurrence [149]. According the *Global Burden of Disease Study 2010*, adverse effects of medical treatment have increased nearly 100% (99.1%) since 1990 [150]. It is estimated that ADRs cause 197,000 deaths annually in the EU [151] costing €79 billion [152]. Drug-related problems in Sweden may account for as much as 12% of hospital admissions [153] and fatal adverse drug reactions (FADRs) are estimated to occur in 3% of all deaths [154]. The safety concerns for antidepressants range from adverse events that make patients feel unwell or prone to stopping the medication to an increase in suicidal thoughts to death either from completed suicide or cardiac arrhythmias [155]. One especially controversial issue (almost polemic in nature) is whether antidepressants might trigger suicidal ideation or behavior (often referred to as suicidality). On a societal level proponents of the hypothesis that antidepressants prevent suicide argue that there is a positive connection between the increased sale of antidepressants and the decrease in suicide [156-157], and, therefore, antidepressants have been claimed to constitute an improvement of public health in Sweden [158]. Other Nordic research, however, contends that the decline in suicide rates preceded the onset of use of SSRIs [157, 159-162] (see Figure 2). This research suggests that since fewer autopsies now are being performed, fewer suicides are diagnosed, giving a biased view of suicide data viewed over the 40-year timeframe in which antidepressants have been available [163]. The positive impact on public health has also been questioned [164].

Figure 2 Suicide and intentional self-harm in the Nordic Countries 1988-2010, per 100 000 inhabitants [165]



Pharmacovigilance

Ensuring that prescribed medicines are of good quality, safe, effective and used by the right patient in the right dose at the right time can minimize the risk of harm [166]. Governments have developed systems to regulate the pharmaceutical industry that ascertain whether drug products are safe and efficacious enough to be permitted on the market, because they have a responsibility to protect public health [167]. Pharmacovigilance (PV) is the science and activities relating to the detection, assessment, understanding and prevention of adverse effects or any other possible drug-related problems [168]. With its core concerns for patient safety and rational drug use, pharmacovigilance is relevant to everyone who ever will utilize modern or traditional medicines and those who care for people taking them [169]. Spontaneous reporting of ADRs to regulatory authorities or drug manufactures remains one of the most important means of monitoring the post-market safety of medicines [170]. According to the WHO an *adverse*

drug reaction (ADR) is defined as a response to a medicine which is noxious and unintended, and which occurs at doses normally used in man. Alternatively, an *adverse event* or *experience* is defined as any unexpected medical occurrence that may present itself during treatment with a medicine, but does not necessarily have a causal relationship with the treatment [171]. The organization, however, acknowledges that it is not always easy to recognize ADRs that may act through the same physiological and pathological pathways as different diseases [171]. The reporting of potential ADRs by health care professionals (HCPs) is supported by WHO and its *Drug Monitoring Programme* [172]. However, the rate of spontaneous ADR reporting is very low for serious and fatal reactions [173], and under-reporting by health professionals is a well-recognized problem by the WHO [171].

Consumer reporting

Starting in the 1960s, patients' rights movements began to question the authority of doctors and demand informed consent and disclosure of medical information [174]. They criticized traditional doctor-patient communication for not including a role for patient health beliefs [175-176] and for neglecting patients' priorities and concerns [177]. According to scholars, this development contributed to downplaying the biomedical approach of modern health care in favor of a more patient-oriented perspective [178]. The changes that have taken place since the 1970s, such as the growth of consumerism and expectations of individual responsibility in health care, have brought the patient's perspective to the fore [178]. An alternative way to increase ADR reporting is, therefore, to allow citizens themselves to report directly to the authorities, so-called *direct patient reporting* (DPR) or *consumer reporting*. The introduction of consumer reporting in pharmacovigilance indicates a change in attitude in which the patient's experience is valued [179] and is believed to accelerate the acquisition of knowledge about adverse effects [180]. Not all approve of using the term "consumer reports," often inferring that medicine is not a consumable good, but rather, a health care tool [70]. However, the term is used by the WHO [168, 181], and by other researchers as well [182-184]. An advantage in using the term "consumer reporting" is that it clarifies that it is referring to direct reporting from the person affected (instead of reporting within or via a health care setting) and that it is a matter of consumer rights.

A potential weakness of consumer reports is the lack of medical confirmation that may impede the interpretation of ADR causation [185]; it may provide a more selective reporting than HCPs, since patients can be influenced by media coverage, of, for instance, a particular drug. However, despite concerns that patient reports may create "noise" and prove a drain on surveillance systems [186] and that ADR reporting should be restricted to HCPs [184, 187], a growing number of research studies have indicated that consumer reporting of ADRs may add value to HCP reports by identifying potential new reactions [170, 182, 185, 188-191] and that patient reporting systems significantly contribute to reliable pharmacovigilance [192]. The WHO also proclaims consumer reporting to be of considerable importance in order to safeguard a pharmacovigilance that will help each patient to receive optimal therapy and on a population basis ensure the acceptance and effectiveness of public health programs [168]. However, because of lack of resources for handling these reports, patient reporting methods have not always been actively promoted [179]. It has been suggested that the main motives for patients to report their ADRs to a pharmacovigilance centre are connected to the severity of the ADR and their need to share experiences [193], sometimes from an explicit altruistic point of view [194].

Forty-six countries have been identified as having consumer reporting schemes [191]. Patients in the US, Canada, Australia and New Zealand have had the possibility to report ADRs since the 1960s, while in other countries, including Denmark, The Netherlands, Norway, the UK and Sweden, reporting has only been available since 2003 and later [179]. A new European pharmacovigilance legislation (Directive 2010/84/EU) (Regulation 1235/2010) [195] that was enforced in July 2012 has been suggested as marking the beginning of a new chapter in drug safety [196]. Its purpose is to further accentuate patient influence, and all EU countries are now obliged to establish patient/consumer reporting within their spontaneous reporting systems, making patients an important part of pharmacovigilance. Still, the awareness that patients can report ADRs is thought to be low in most countries [179]. The use of social media and especially Facebook as a way to increase spontaneous reporting has, therefore, been discussed [197].

In Sweden it has been possible for consumers to submit reports to the Medical Products Agency (MPA) since 2008, and these reports are now deemed an increasingly valuable contribution in the monitoring of safety aspects in medicines [198]. The MPA also offers the opportunity for the consumer to use free text in describing drug reactions. A consumer can

report directly on the agency's website or print out the report and send it via regular mail. Consumer reporting was introduced in Sweden by KILEN, a non-profit organization working on consumer rights issues of dependence, side effects and injuries related to medicines. This organization established a consumer database in 1997 to collect consumer reports mainly focusing on benzodiazepines and antidepressants.

Medicalization: A theoretical perspective

Sociologists have studied social aspects of medicine from a medicalization perspective since the late 1960s and the corresponding literature over the years is sometimes referred to as "the medicalization thesis" or "medicalization theory" [60]. This thesis uses some aspects of this broad medicalization perspective as a theoretical frame of reference. Medicalization is a critical sociological perspective seldom used in public health research, where an epidemiological perspective is often prioritized.

Irving Kenneth Zola was one of the first to use the term "medicalization" in the 1970s to describe medicine as an institution of social control. He argued that much of daily living was being medicalized by making medicine and the labels "healthy" and "ill" relevant to an ever-increasing part of human existence [199]. Zola's argument, introduced in the phrase "the medicalization of society," came to be known as the medicalization thesis or theory [200]. During this period Zola claimed that medicalization and the labeling of "healthy" and "ill'" was perhaps most evident in two branches of medicine that had a built-in social emphasis from the very start: psychiatry and public health/preventive medicine. His argument was that psychiatry, like public health, used the legal powers of the state in the accomplishment of its goals, i.e., the cure of the patient through the legal proceedings of involuntary commitment and removal of certain rights and privileges [199]. A classic example of medicalization is pregnancy, which has been increasingly transformed throughout modern history from a somewhat natural and private occurrence to a medical clinical experience. One critical argument is that medicalization narrows the definition of health and widens the definition of illness [76]. Others critics during this period included Eliot Freidson [175], Ivan Illich [201], Peter Conrad [202], Michel Foucault [203-204], R. D. Laing [205], and Thomas Szasz [206]. Some of them were part

of the radical so-called “antipsychiatry movement” in the 1960s and 1970s who questioned the entire medical model and its impact on psychiatry.

As previously mentioned, medicalization is often described as a process by which problems (not self-evidently medical) are defined and treated as medical problems, usually described in terms of diseases and disorders [207], but also abnormalities [75] and deviances [208]. It can also include the invention of new terminology to describe what had previously been considered everyday aspects of life [77]. In cultural terms it can involve exporting ideas of illness and disease beyond the body to make sense of conditions and experiences that are distinctly cultural and social [209]. The term “medicalization” has been used more often in the context of a critique of medicalization (or overmedicalization) than as a neutral term simply describing that something has become medical [207]. Examples of medicalization criticisms within psychiatry (a kind of psychiatrization) include among others the questioning of diagnoses such as depressive disorder [8], social anxiety disorder (SAD) [210], post-traumatic stress disorder (PTSD) [211], ADHD [60, 202] and premenstrual dysphoric disorder (PMDD) [79], i.e., mental disorders that are often treated with psychotropic medication.

According to Peter Conrad’s original thesis, medicalization can occur on at least three levels: conceptual (a medical vocabulary or model is used to order or define the problem and medical professionals need not be involved), institutional (organizations may adopt a medical approach to treating a particular problem, and physicians may function as gatekeepers), and interactional (physicians are more or less directly involved and define a problem as medical in a doctor-patient interaction) [207].

From doctor dominance to patient rights

In the early writings of medicalization, doctors were depicted as central to the process in terms of medical imperialism [201], professional dominance [175, 212] and medical claims-making [208]. Sociological thinking about medical knowledge and medical work during the 1960s and 1970s was influenced by the predominant theories of the time and also by the way health care was organized [178]. More specifically within medicine the rise

of patients' rights movements was influenced by the exposure of abuses in medical research, when it emerged in the 1960s that in some cases informed consent was not being obtained for potentially dangerous procedures [213]. The development of a new and distinctly sociological approach to medical knowledge and medical work in the 1960s and 1970s was critical of the biomedical approach. This led many early sociologists of health and illness to form a strong alliance with the "patient's perspective," and a lot of research in the 1970s was concerned with identifying the social organizational sources of the power of the medical profession and spelling out their negative consequences for patient care [178]. According to Peter Conrad, changes in medicine in the past two decades have altered the medicalization process to be more driven by commercial and market interests than by professional claim-makers [214]. On the demand side of medicalization, there has been growth in consumer demands for medical solutions [76] through the activities of certain social movements and interest groups [214].

Biomedicalization and pharmaceuticalization

Sociological studies of medicine have typically centered on the concept of medicalization, but in the last decade or so, this concept has come to be questioned from within sociology itself. Thus, Nikolas Rose calls the medicalization thesis a cliché of critical social analysis that lacks explanatory power because, among other things, it fails to consider advances in medicine, patient consumerism, the growing evidence-based medicine movement, and the industry's increasing influence over health policies and markets, that jointly constrain the power of doctors over patients [215]. Debates on the merits and shortcomings of the medicalization framework have catalyzed the emergence of an array of novel concepts for making sense of the changing relationship between biomedicine, the medical profession, the state, industry, patients and markets [216-217]. A recently suggested notion in this context is *pharmaceuticalization* [218], which one writer defined as:

> "the process by which social, behavioral or bodily conditions are treated or deemed to be in need of treatment, with medical drugs by doctors or patients" [70].

It involves the discovery, development, commercialization, use and governance of pharmaceutical products centered on chemistry-based technology [218]. Thus, pharmaceuticalization can grow without expansion of medicalization, because some drugs are increasingly used to treat an established medical condition involving no alteration of a non-medical problem into a medical one [70]. According to advocates like Abraham, pharmaceuticalization should be understood by reference to five main biosociological explanatory factors: biomedicalism (i.e. advances in biomedical science to meet health needs), medicalization, pharmaceutical industry promotion and marketing, consumerism, and regulatory-state ideology or policy [70].

Proponents of the explanatory factor biomedicalism sometimes argue that the medicalization theory in some aspects has been reformulated as the biomedicalization thesis, denoting the multiple ways in which technosciences and medicine are transforming disease, illness, health and lifestyle [216]. In the age of biomedicalization, biological science is argued to have become the overarching scientific discourse that claims to explain both psychological and social phenomena [200]. Whereas within medicalization there are largely top-down medical professional-initiated interventions, biomedicalization also points out new actors, including health social movements, consumers, Internet users, pharmaceutical corporations, advertisements, and websites [216]. It is important to be aware of these changes and interpretations of the medicalization theory. However, since medicalization is the original concept, in this thesis it will be used as an overarching perspective with biomedicalization and pharmaceuticalization as different independent perspectives.

Good and bad aspects of medicalization

In their classic book *Deviance and Medicalization: From Badness to Sickness*, Conrad and Schneider [208] argue that there may be both good and

bad aspects of medicalization. Positive aspects of medicalization can include a more humanitarian conception of deviance, extension of the sick role minimizing blame, a more optimistic view of change (presented by the medical model) and access to medical attention and treatment. However, the potentially bad aspects of medicalization, including dislocation of responsibility from the individual, an assumption of moral neutrality of medicine, problems engendered by the domination of expert control, individualization of complex social problems and depoliticization of certain conditions make them skeptical of potential social benefits of medicalization.

Iatrogenesis

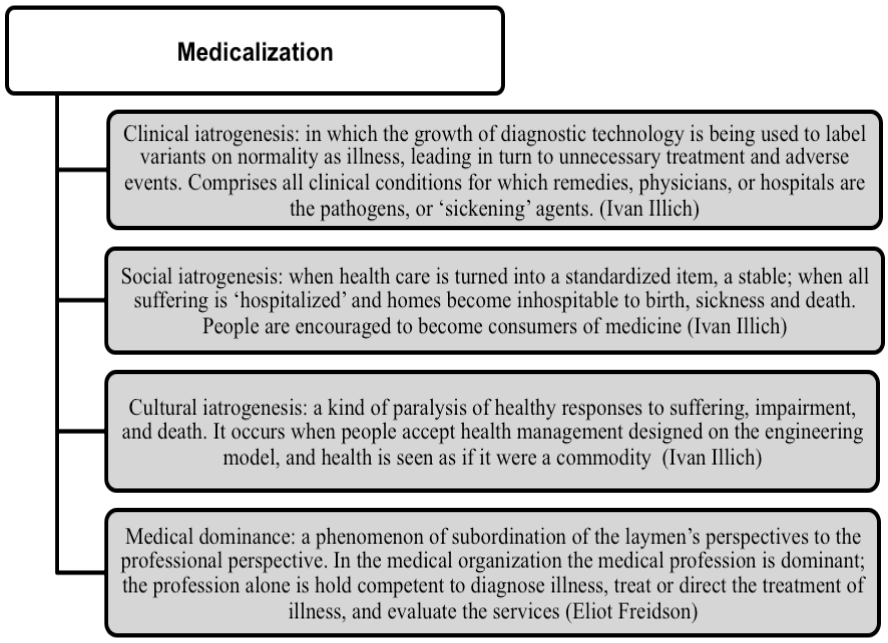
A particularly prominent figure in the original medicalization debate was Ivan Illich who in the 1970s argued that an expanding proportion of the new burden of disease in itself was doctor-made, or iatrogenic [201]. Iatrogenic disease as described in a public health dictionary indicates disease resulting from the actions of a physician or other health professional, usually meaning conditions specifically caused by following medical advice, for instance using prescribed medications, or surgical interventions [77]. Illich himself described iatrogenesis as clinical, in which the growth of diagnostic technology was used to label variants on normality as illness, leading in turn to unnecessary treatment and adverse events [201]. He also described a social and cultural form, whereby the increasing medicalization of life encouraged a growing number of essentially normal people to feel they had something wrong and become dependent on doctors. By including and considering all aspects of iatrogenesis (clinical, social and cultural) from a public health perspective, it is possible to cover different aspects of medicalization.

Medical dominance

Eliot Freidson was another important figure and one of the first to describe the professional dominance as a phenomenon of subordination of the laymen's perspectives to the professional perspective. Medicalization represented a fundamental shift in thinking among medical sociologists by highlighting the potential inequity taking place in medical encounters [219]; it was an alternative way to understand the dynamics between doctor and patient [220]. Freidson argued that medicine's knowledge of illness and its treatment is considered to be authoritative and definitive [175, 212] and a diagnosis holds a vital role in reinforcing medical authority [175]. Furthermore, the process of treatment and care may be seen as a process that attempts to influence the patient to behave in ways considered appropriate to the diagnosed illness, a process often called "management by professionals" [175].

The theory of medicalization may also provide an explanatory framework to understand the changing face of medical authority [221]. During the past 30 years the medicalization framework has been developed as an analytical tool to understand the changes in power of the medical profession and patients in the contemporary health system [200]. The medicalization theory does not, however, solely focus on uncovering the imperialism of medical institutions, since it is not always the increasing authority that is seen as problematic. Medicalization processes may also obscure social questions or conflicts [222]. Iatrogenic and medical dominance are just some examples of how medicalization can be studied, and Figure 3 shows the different aspects of medicalization that will be discussed to support the analysis of Studies I-IV.

Figure 3 Analytical framework: different aspects of medicalization



Aims and disposition of the thesis

General aim

The aim of this thesis is twofold. The first objective is to describe and analyze experiences with antidepressant treatment for depression as expressed in adverse drug reaction (ADR) reports from patients, i.e. "consumers reports." A second goal is to conduct a theoretical discussion, by looking at broad societal changes, and analyzing the consequences of mental ill health as a significant public health problem. Special attention will be given to medicalization.

Specific aims

Study I: This study performs a descriptive quantitative analysis of consumer reports on psychiatric adverse effects of antidepressant medication to the Swedish non-profit organization KILEN.

Study II: This study analyzes free text comments of experiences of psychiatric adverse effects in consumer reports to the Swedish non-profit organization KILEN.

Study III: This study analyzes free text comments of experiences of mental ill health symptoms and the medical encounter in consumer reports to the Swedish non-profit organization KILEN.

Study IV: This study explores, problematizes, and discusses the issues of mental ill health as a significant public health problem.

Disposition and structure of the thesis

The main focus of this thesis is experiences of antidepressant treatment as expressed in consumer reports to the Swedish non-profit organization KILEN (Studies I-III). Attention will also be given to the wider societal context of the medical encounter (Study III) and to the overarching public health perspective (Study IV). Studies I-III are empirical studies, focusing on specific individual-level phenomena, whereas Study IV concerns a much more abstract and general level of discussion. An argument may seem needed as to their incorporation in the same thesis. By investigating consumer reports one gain insight into how people, as individuals and as a group, experience mental health problems, their diagnosis and treatment, and their relationships to health care personnel. Those experiences, however, take place within the context of an ongoing and seemingly rapid societal/cultural transformation of our ways of perceiving and understanding mental ill health. This change, and its ensuing problems and possibilities, are of the utmost importance to public health as a practice and as a science. The broad-scope reflections of Study IV are intended to provide a contribution to the political and theoretical discussion that is emerging concerning the combating of mental ill health as a public health agenda. The application of some aspects of medicalization theory to the results of the empirical studies, as well as to the reasoning in Study IV, is also intended to suggest the correspondence between the two seemingly disparate levels of analysis and discussion.

Methods and materials

Data sources

This thesis uses multiple sources and different methods in order to collect and analyze data in Studies I-IV. Quantitative and qualitative methods have very different strengths. Quantitative research is essential for describing the extent and pattern of a certain phenomenon and the factors that are related to it within a community, while qualitative research can describe the meaning of, for example, disease, poverty or caring, and can help us understand how public health strategies can assist in solving these problems [99]. Traditionally, quantitative methods with positivistic underpinnings have dominated public health research, but it has lately been argued that public health research also needs qualitative methods in order to improve understanding of public health concerns [223]. Qualitative methods are, therefore, becoming increasingly used in public health research, indicating the need for methods that are able to reflect the complexity of social perspectives on health [99]. As shown in Table 4 on page 45, this thesis uses both basic quantitative methods to describe type and distribution of antidepressant drugs and psychiatric adverse drug reactions in consumer reporting (Study I) and qualitative methods in order to analyze content of the free text comments accompanying these reports (Studies II and III). In Study IV a literature overview in a broad and general sense is performed to underpin a theoretical discussion on health, public health, mental ill health and medicalization.

The KILEN material

Drug dependency and concern about potential overdosing (mostly barbiturates and benzodiazepines) started to be acknowledged and taken seriously in the 1960s and 1970s and have continued to be seen as important [115, 224]. This development in Sweden led to the creation of non-profit organizations like the National Association for Aid to Drug Abusers (RFHL) in 1965 and KILEN - Consumer Institute for Medicines and Health in 1992. KILEN based their work on direct contact with those afflicted by the problem of adverse drug effects and other treatment injuries by providing counseling, support and direct assistance [225]. In 1997, KILEN established a consumer database in order to collect consumer reports that focused mainly on adverse drug reactions (ADRs) from benzodiazepines and antidepressants because these were commonly reported drugs by consumers. This has provided the opportunity for consumers to report their perceptions and experiences of using medicines, and since 2002, it has also been possible to report suspected ADRs to this organization through a web-based report form. In 2000 KILEN organized the first International Conference on Consumer Reports on Medicines, an important event in getting the idea of consumer reporting known and more widely accepted [180]. Participants included experts from the medical and pharmaceutical professions, drug regulatory authorities, the consumer movement and the WHO [226]. KILEN has been referred to as an early contributor of patient reporting and gained attention in the scientific literature [185, 190]. It has been argued that many patient reporting systems focus only on adverse events, missing out on other aspects of medicine use such as experiences in ineffectiveness [190], but the web-based report form provided by KILEN allows for adding free text comments of the experiences. KILEN as a consumer institute was unexpectedly forced to cease operations in March 2007, when the Swedish Parliament (Riksdag) decided not to allow further government grants [227-228]. Despite these changes, it was still possible to report adverse events and ADRs through the web-based form to KILEN until 2013, when also the website had to shut down. The reports constitute unique consumer reporting material in Sweden, but it is important to acknowledge that it is selected material, which may enhance the risk of getting biased views of patients' experiences of treatment. This will be elaborated on further in the text.

Open-ended survey questions

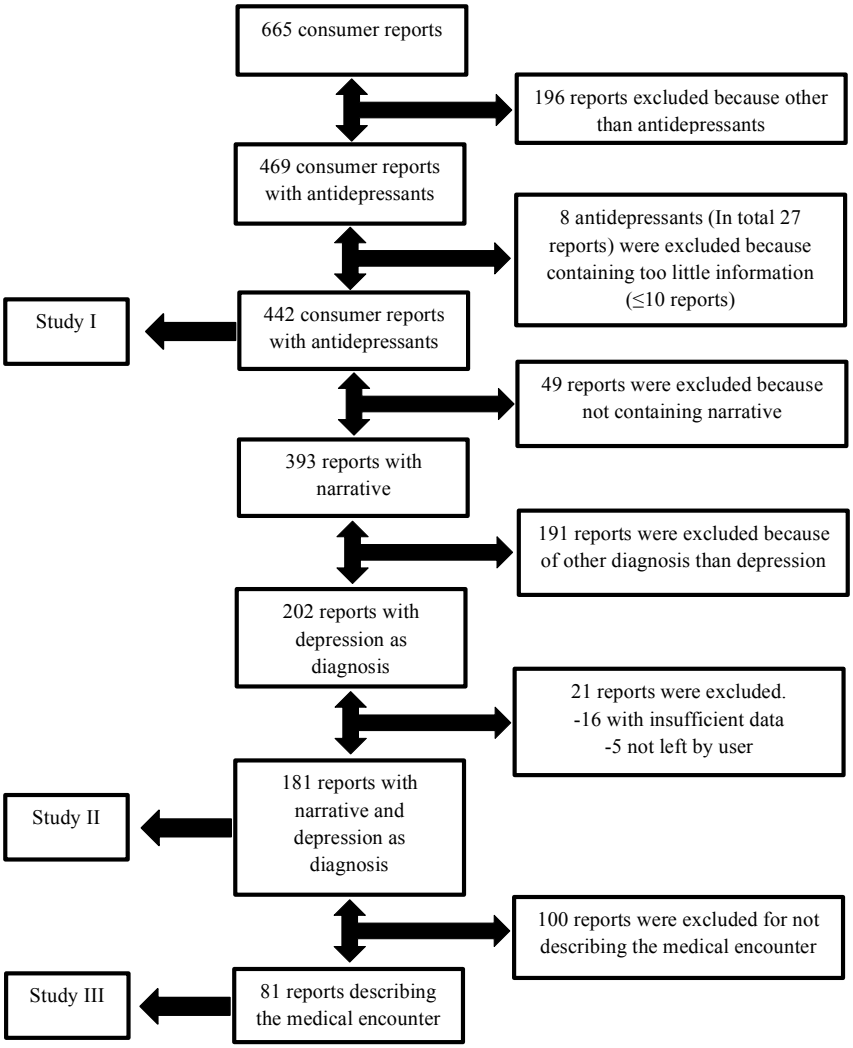
Reports of adverse drug reactions were designed by KILEN as an open-ended survey on a Swedish website. Data from reports submitted from January 2002 to April 2009 were used in this thesis. A report in the KILEN material was defined as one individual's reported experience with a drug and an ADR was equal to one single reported effect connected to a specific drug. As Table 3 shows, the report form included items such as user information (age, sex, location and condition of health) and an account of the treatment (medical history, drugs, doses and reactions). This was of interest in Study I. It was also possible to provide a longer description of the experience as free text comments, which were the focus of interest in Studies II-III. More than one ADR related to the same drug could be submitted. The reported ADRs to KILEN were compiled and coded in a similar way to those listed in the *Swedish Physicians' Desk Reference*, FASS. FASS builds on the Summary of Product Characteristics (SPC) from the pharmaceutical companies. KILEN personnel accomplished this by using the database software FileMaker. Regulatory authorities like the Medical Products Agency do not handle data submitted to KILEN.

Table 3 The KILEN Web-based report form

Sex	Man		Female	
Hometown and Country				
Age				
Report submitted by	Consumer	Relative	Doctor	Other
Medicine				
Medicine prescribed for following illness/condition				
Dose				
Start date				
Stop date				
Effect 1		Under	After	
Effect 2		Under	After	
Effect 3		Under	After	
Other medicines currently being taken				
Other illnesses/conditions other than that mentioned above				
Your own story				

As Figure 4 shows, of 665 individual consumer reports, 469 concerned antidepressants and 442 of these provided enough information to be included in Study I. A total of 393 antidepressant reports included a lengthier description of the ADR experience presented as free text and 202 of these reports concerned depression as a diagnosis (most reported cause for prescription). Twenty-one reports were excluded, since they were reported by someone other than the patient (5) or contained too little information (16). Studies II and III include 181 reports with narratives. Many of the descriptions of the ADR experience also included narratives of the doctor-patient interaction (81 reports). Study II focuses specifically on the qualitative descriptions of ADRs, while Study III focuses on patients' views of mental ill health symptoms and the doctor-patient interaction.

Figure 4 Flow diagram of selected consumer reports to KILEN



Study design and data analyses

Several methods for data analyses were applied due to the range of study designs and materials used in this thesis. Table 4 provides an overview of the studies that were included.

Table 4 Overview of study design and methods

Study	Aim	Study design and method	Study period	Data sources	Included material	Status
I	To analyze psychiatric adverse effects of antidepressant medication	Quantitative descriptive analysis	2002-2009	Consumer reports from KILEN's Internet-based reporting system in Sweden.	442 consumer reports	Article published
II	To analyze free text comments of experiences of psychiatric adverse effects of antidepressant medication	Qualitative content analysis	2002-2009	Consumer reports from KILEN's Internet-based reporting system in Sweden.	181 consumer reports	Article published
III	To analyze free text comments of experiences of mental ill health symptoms and the medical encounter	Qualitative content analysis	2002-2009	Consumer reports from KILEN's Internet-based reporting system in Sweden	81 consumer reports	Article published
IV	To explore, problematize, and discuss the issues of what it means that mental ill health is a great public health problem.	A literature overview and theoretical discussion.	Searches were made 2008-2009	Searches in electronic databases and electronic search engines Handsearching of relevant journals and books	Scientific articles, books, book chapters, policy documents	Article published

Quantitative descriptive analysis

In Study I, 442 consumer reports were compiled and analyzed according to age, sex, antidepressant drug reported and ADR by using basic statistical analysis to present mean and percentage. The aim was to get an overview of the content of the KILEN consumer reports reported through the website. Reported drugs were coded according to therapeutic groups [Anatomical Therapeutic Chemical (ATC) system] [229] and types of reported ADRs (system organ classes) [230]. The ATC Classification with Defined Daily Doses (ATC/DDD) system classifies therapeutic drugs, and the system serves as a tool for drug utilization research in order to improve the quality of drug use [229]. In the ATC classification system, the drugs are divided into different groups according to the organ or system on which they act and their chemical, pharmacological and therapeutic properties [229]. This system is also valid for the *Swedish Physicians' Desk Reference*, FASS. The ADRs in FASS are classified according to the *Medical Dictionary for Regulatory Activities* (MedDRA) system organ class where reactions are reported corresponding to their frequency (Very common = >10%, Common =1-10%, Less common = 0.1-1%, Rare = 0.01-0.1%, Very rare = <0.01%, Unknown frequency).

Qualitative content analysis

Qualitative content analysis was used to interpret the patients' free text comments in Studies II and III. Content analysis here refers to qualitative data reduction and sense-making effort that take a volume of qualitative material and attempt to identify core consistencies and meanings [231]. The procedure is basically as follows: data are collected and coded by theme or category; the coded data are then analyzed and presented [232]. The unit for analysis was the free text provided by informants in the KILEN consumer reports. These comments were first sorted into meaning units (constellations of words or statements that relate to the same central meaning) and then condensed meaning units (process of shortening while still preserving the core) [233]. Creating categories is the core feature of qualitative content analysis and refers to a descriptive level of content; a category often includes a number of sub-categories [233]. All included consumer narratives on

depression and antidepressant treatment (Study II) and the medical encounter (Study III). These were read thoroughly several times in order to get an understanding of their content. The content of these narratives was then sorted into different main categories and reread, which resulted in subcategories and sometimes new main categories [233]. Content analysis involves a balancing act, where on one hand it is impossible and undesirable for the researcher not to add a particular perspective to the phenomena under study, but on the other hand the researcher must "let the text talk" and not impute meaning that is not there [233]. To make valid inferences from the text, it is vital that the classification be reliable in the sense of being consistent: different people should code the same text in the same way [234]. Therefore, all authors were involved in analyzing the themes that emerged from the data and were also responsible for reading and confirming the analysis. The authors discussed the analyses—the coding, categorization and interpretation of the results—throughout the work process to gain a mutual understanding. This process was also valid for the selection of quotations describing common experiences found within certain categories. This way of working was done in order to problematize the role of the researcher and to avoid overlooking vital information or exaggerating specific content.

A literature overview and theoretical discussion

In Study IV a literature overview in a broad and general sense was performed to underpin a theoretical discussion on health, public health, mental ill health and medicalization. In order to discuss the significance of mental ill health as a public health problem, different philosophical theories of the meaning of health were used. Databases such as PubMed, Social Science Index, WHO Library Database, Oxford University Online Union Library Catalogue and LIBRIS (joint catalogue of the Swedish academic and research libraries) were used as well as search engines like Google and Google Scholar. Searches were conducted using various terms and combinations of words such as public health, history of public health, theory of health, philosophy of health, illness, mental health, mental ill health, mental illness, mental disorder, disease, and medicalization. In addition, hand searching of relevant journals within medicine, psychiatry and public health was conducted. Reference lists of articles were used to further grasp

interesting research. The literature was subjected to a theoretical analysis and discussion. The intention was to focus on some examples to show the kind of reasoning that is prominent within the discourses. Thus, the focus was on literature that is frequently used (e.g., textbooks) or often referred to. All authors were involved in analyzing the literature and part of the theoretical discussion throughout the work process to gain a mutual understanding.

Quality criteria

Validity, reliability and generalizability are concepts that enable the value of quantitative research to be judged. Three types of *validity* are defined: face validity, which is concerned with whether the methods assess what they set out to; internal validity, which refers to the rigor of the methods used; and external validity, which refers to the extent to which the results can be generalized beyond the selected sample [99]. *Reliability* refers to research consistency, and *generalizability* refers to the extent to which the research findings can be applied to other settings and still have some meaning [99].

There has been considerable debate over whether qualitative and quantitative methods can and should be assessed to the same quality criteria [235], especially regarding if the positivistic concepts of validity, reliability and generalizability can be applied to qualitative research. There are distinct ways of assessing qualitative research, but it is still common for the validity and reliability of public health qualitative research to be called into question by positivist scientists who consider the qualitative methods to be subjective, and, therefore, invalid and unreliable [99]. While the credibility in quantitative research depends on instrument construction, in qualitative research it is the researcher who is the instrument [231]. Reflexivity, that is the process of reflecting critically on the self as researcher, becomes especially important [236]. Quality in qualitative research can be assessed with the same broad concepts of validity and relevance used for quantitative research, but this need to be operationalized differently to take into account the distinctive goals of qualitative research [235]. Although reliability and validity are treated separately in quantitative studies, these terms are not viewed separately in qualitative research [237]. They also have to be redefined in order to reflect the multiple ways of establishing truth, and these terms are instead conceptualized as trustworthiness, rigor and quality in the

qualitative paradigm [237]. As in quantitative research, the basic strategy to ensure rigor, and thus quality, in qualitative research is a systematic, self-conscious research design, data collection, interpretation, and communication [235].

Trustworthiness

To ensure reliability in qualitative research, examination of *trustworthiness* is crucial [237]. Lincoln and Guba [238] outlined criteria for assessing the trustworthiness of qualitative research (credibility, transferability, dependability and confirmability) that parallel internal and external validity, reliability and objectivity respectively. The issues of the inappropriateness of quantitative criteria in the assessment of qualitative research and the plurality of qualitative research are crucial to the understanding of any model of trustworthiness of qualitative research [239]. *Credibility*, they argue, is equivalent to truth value [238], and in qualitative research truth value is usually obtained from the discovery of human experiences as they are lived and perceived by informants. This is sometimes regarded as the most decisive criterion for the assessment of qualitative research [239]. In this thesis free text comments in the KILEN reports are used to establish truth value. Lincoln and Guba [238] noted that *transferability* is more the responsibility of the person wanting to transfer the findings to another situation or population than the one researched and argued that the problem of applicability is addressed as long as the researcher presents sufficient data to allow for comparison. The third criterion of trustworthiness considers the consistency of data, that is, whether the findings would be consistent if the inquiry were replicated with the same subjects or in a similar context [239]. Unlike the relatively controlled experimental environment, the qualitative field setting may be complicated by extraneous and unexpected variables, and variability is, therefore, expected in qualitative research and consistency is defined in terms of *dependability* [239]. In quantitative research, objectivity is the criterion of neutrality and is achieved through the rigor of methodology through which reliability and validity are established [239]. Lincoln and Guba [238] shifted the emphasis of neutrality in qualitative research from the researcher to the data, and suggested that *confirmability* be the criterion of neutrality by establishing truth value and applicability. Studies I-III will be analyzed according to these quality criteria. Study IV is a theoretical article where these criteria do not apply.

Ethical considerations

The Declaration of Helsinki strives to ensure that research is carried out in an ethical way and follows accepted scientific principles [240]. According to the Council for International Organizations of Medical Sciences (CIOMS), all research involving human subjects should be conducted in accordance with three basic ethical principles: respect for people, beneficence and justice [241]. The CIOMS ethical guidelines takes a much broader view on the players in the research process and address issues such as research of vulnerable groups, the role of eternally sponsored research and the selection of groups or communities to participate in research [242]. The public is given an assurance that they will not be asked to participate in an experiment unless it has been carefully examined by a group of scientists and laymen, with attention paid both to the frankness of the scientist's disclosure of risks and benefits and the adoption of any needed protection for the participants [243]. In Studies I-III, reporters were informed that their voluntary submission of adverse event reports through the KILEN website could be compiled and used for research but that no personal information would be identified. Reporters were also given the chance to provide information anonymously. Written consent was for practical purposes not collected, but informants were informed that they could withdraw their report or withhold their consent for scientific publication by contacting the organization. Furthermore, the database manager at KILEN coded the material and made it anonymous by removing the reporters' names and addresses and replacing them with a number. The Regional Ethics Review Board in Gothenburg, Sweden, approved the project (No. 319-10). The ethics committee approved the consent procedure.

Study IV was theoretical and did not involve human research subjects, but general scientific ethical principles were considered. Ethical principles of honesty, carefulness and openness were followed [244].

Results

Study I

In total 665 individuals submitted reports on ADRs related to a specific drug, and 469 of these reports involved antidepressants. Fifteen different antidepressant drugs were reported, but too little information was provided for eight of these antidepressants (≤10 individual reports). The 442 individual antidepressant reports included in the study represented 2392 ADRs and of these, 878 were psychiatric ADRs (37%) (Table 5). Seventy-five percent of the individual reports concerned serotonin-reuptake inhibitors (SSRIs) and 25% involved serotonin-norepinephrine reuptake inhibitors (SNRIs). The age range among the individuals studied was 15-85 years. The most frequently reported psychiatric ADRs to KILEN were anxiety, a sensation of unreality, insomnia, uneasiness/nervousness, irritability, aggressiveness, suicidal behavior, and depression (see Table 5). Of the psychiatric ADRs women accounted for 70.8% of the reports and men 23.7%. The distribution of ADRs per report was quite even between women (5.4) and men (5.2).

Table 5 Reports and ADRs of antidepressant medication to an open Website according to the system organ class of psychiatric system[1] (Study I).

Antidepressant ATC code N06A	Reports (N) Total = 442	ADRs (N) Total = 2392	Psychiatric ADRs (N) Total = 878	ADRs/report	Most common psychiatric ADR (%)
Sertraline[a] N06AB06	116	626	226	5.4	Anxiety 5.9 Sensation of unreality 4.0 Insomnia 3.0 Uneasiness/nervousness 2.6 Irritability, aggressiveness 2.2 Suicidal behavior 1.9
Citalopram[a] N06AB04	107	570	226	5.3	Anxiety 7.9 Insomnia 3.7 Sensation of unreality 2.8 Suicidal behavior 2.5 Uneasiness/nervousness 2.5 Depression 2.1 Irritability, aggressiveness 2.1
Venlafaxine[b] N06AX16	78	505	171	6.5	Anxiety 4.2 Suicidal behavior 3.2 Uneasiness/nervousness 2.8 Sensation of unreality 2.8 Insomnia 2.4
Paroxetine[a] N06AB05	58	327	121	5.6	Anxiety 5.2 Irritability, aggressiveness 3.4 Suicidal behavior 3.1 Insomnia 2.3 Depression 2.1
Mirtazapine[b] N06AX11	34	131	46	3.9	Anxiety 6.9 Insomnia 6.1 Irritability, aggressiveness 3.1 Suicidal behavior 2.3 Uneasiness/nervousness 2.3
Fluoxetine[a] N06AB03	28	120	39	4.3	Anxiety 5.0 Irritability, aggressiveness 2.5 Suicidal behavior 2.5 Insomnia 2.5
Escitalopram[a] N06AB10	21	113	49	5.4	Anxiety 7.1 Sensation of unreality 6.2 Insomnia 5.3 Depression 3.5 Irritability, aggressiveness 3.5 Suicidal behavior 2.7 Uneasiness/nervousness 2.7

[1]According to ATC classification system, the drugs are divided into different groups according to the organ or system on which they act and their chemical, pharmacological and therapeutic properties.

[a]Selective serotonin reuptake inhibitor (SSRI)

[b]Serotonin-norepinephrine reuptake inhibitor (SNRI)

Many (34.5%) of the antidepressant psychiatric ADRs were reported by consumers in the age group 30-39 years of age (women 26.8% and men 6%). Also age groups 15-29 years of age (23.6%) and 40-49 years of age (22.1%) were common reporting groups. Women contributed a majority of the antidepressant reports (65.3-82.7%) compared to men (12.2-28.9%). Only Mirtazapine was more evenly reported (52.1 compared to 43.5%). Some

ADRs were indicated more with certain antidepressants, but anxiety, insomnia and suicidal behavior were reported for all drugs. Experiencing a sensation of unreality was a common ADR in four analyzed antidepressants. Several reports to KILEN included withdrawal symptoms; one-fourth to one-third of psychiatric ADRs were reported during discontinuation (Table 6).

Table 6 Reported antidepressant psychiatric ADRs to KILEN during different stages of treatment (Study I)

Type of reported psychiatric adverse drug reaction and frequency (N)	During treatment (%)	During discontinuation treatment (%)	After treatment (%)
Anxiety (139)	40	34	26
Sensation of unreality (57)	54	25	21
Insomnia (72)	54	28	18
Uneasiness/nervousness (50)	50	30	20
Irritability/aggressiveness (45)	49	33	18
Suicidal behaviour (59)	68	19	13
Depression (20)	25	45	30

Study II

Of the 181 consumer reports included and analyzed, women contributed 75% and men 21% (4% were excluded for not reporting sex). The antidepressants most commonly mentioned with a diagnosis of depression were Sertraline (23.8%), Citalopram (23.8%), Venlafaxine (23.2%), Mirtazapine (10.5%), Paroxetine (7.7%), Escitalopram (6.1%) and Fluoxetine (5.0%). As described in Table 7, three main categories emerged from the analysis of the KILEN data: (1) *Experiences of drug treatment* with subcategories of (a) *Severe psychiatric adverse reactions*, and (b) *Discontinuation symptoms,* (2) *Lack of communication and* (3) *Trust and distrust*.

A main category in the KILEN material concerned patients' experiences of suspected adverse reactions during their treatment with antidepressants. Only 8.8% of the consumer narratives contained positive experiences of antidepressant drug treatment. Severe psychiatric adverse symptoms were particularly perceived as something difficult during and after treatment, and especially during discontinuation. Fear of discontinuation symptoms made

some patients afraid of ending their treatment; these patients usually continued to take antidepressants, despite the fact that they did not want to become dependent on them. Several reports included narratives of patients not receiving information of potential ADRs from their doctor. They also indicated that there were no follow-ups of the treatment. Trust was highlighted as especially important, and some patients reported losing confidence in their doctor when they were not believed about the (suspected) ADRs they experienced, causing them to discontinue the antidepressant treatment on their own.

Table 7 Categorization of the analyzed components – examples of patients' statements in the KILEN consumer reports[1] (Study II)

Meaning unit	Condensed meaning unit	Main-category	Sub-category
"Difficulties concentrating at work, having suicidal thoughts."	Patient experienced suicidal thoughts.	Experiences of drug treatment	Severe psychiatric adverse reactions
"And when the death wish comes, I become so afraid that I start again."	Patient experienced feelings of wanting to die when trying to end medication.		Discontinuation symptoms
"When I first started taking it I received NO [sic!] warnings of adverse drug reactions."	Patient received no warnings of side effects from the doctor.	Lack of communication	
"Decided that after three years of 'chemical terror' to discontinue, WITHOUT [sic!] doctor's approval."	Patients decided to end drug treatment without telling the doctor.	Trust and distrust	

[1] Categorization according to Graneheim & Lundman (2004).

Study III

Of the 181 consumer reports included and analyzed, 81 contained a qualitative description of the medical encounter (women 81% and men 19%). As described in Table 8, three main categories emerged from the analysis of the KILEN data: (1) *Different interpretation and understanding of the problem*, (2) *Choice of treatment strategy,* with subcategories (a) *Antidepressants as the obvious choice* and (b) *Psychotherapy seldom an alternative,* and (3) *Trust and distrust* with subcategories (a) *Experiencing indifference and nonchalance* and (b) *Feeling forced to accept diagnosis and treatment,* and (c) *Feeling abandoned by the doctor.*

Overall, the KILEN stories contained negative experiences of the patients' medical encounters. Some reports indicated intense emotional indignation and strong feelings of abuse by the health care system. Many reports

suggested that doctors and patients had very different accounts of the nature of the problems for which the patient was seeking help. Although patients sought help for problems such as fatigue and sleeplessness (often with a personal crisis of some sort as a described cause), the treating doctor in most cases was very quick in both diagnosing depression and prescribing antidepressant treatment. Psychotherapy was seldom presented as a valid treatment option, despite patients sometimes requesting it, usually with a belief that they needed someone to talk to about their issues. When patients felt they were not being listened to, trust in the doctor was compromised. This was evident in the cases when the doctor tried to convince them to take part in medical treatment, sometimes by threatening to withdraw their sick-listing. Some patients described feeling abandoned by their doctor, sometimes throughout the entire treatment period.

Table 8 Categorization of the analyzed components – examples of patients' statements in the KILEN consumer reports[1] (Study III)

Meaning unit	Condensed meaning unit	Main-category	Sub-category
In fact, my so-called 'depression' was a normal reaction to crisis following separation, homelessness, loss of two jobs within three years, and death in the family.	The physician diagnoses depression while the patient thinks it is a normal reaction to life events.	Different interpretations and understandings of the problem	
The doctor has told me to continue in order to feel better and that I shall understand it as a 'vitamin boost'	The patient experience that the doctor compares antidepressants to vitamins so that she will stay on them	Choice of treatment strategy	Antidepressants as the obvious choice
All I wanted was someone to talk to, some sort of therapy.	The patient wants therapy.		Psychotherapy seldom an alternative
The first doctor I visited barely looked at me when I told her about my symptoms	The patient feels that the doctor avoids eye contact when she is trying to describe her symptoms.	Trust and distrust	Experiencing indifference and nonchalance
…I refused despite threats of ending my sick-listing, since I 'apparently did not want to get better as I was avoiding work', as he [the doctor] concluded.	The patient is feeling threatened by the doctor to accept diagnosis.		Feeling forced to accept diagnosis and treatment
While I have been medicating my doctor and I have not spoken.	The patient feels being left adrift by the doctor		Feeling abandoned by the doctor

Study IV

The result of Study IV suggests that there are basically two different understandings of the meaning of health, a more reductionist approach (health as absence of disease) and a holistic approach (health as well-being, balance or ability). These understandings are connected to different historical views of public health; we have a more narrow medical view and a broader more socially-oriented one. The different understandings of disease and illness within the different theories of the meaning of health can have an important influence regarding public health action. Table 9 illustrates what actions the different theories of the meaning of health would tend to advocate as possible public health actions toward mental ill health.

Working with an understanding of health as the absence of disease, the matter of mental illness is turned into a medical/clinical problem, where the solution is often treatment by medication. This approach is more oriented toward disease and disease prevention, where disease within the theory is a necessary condition of illness. With a holistic understanding of health, public health would also need to be concerned with areas other than those that are medically defined, since ill health and illness can exist without disease. The expanded concept of health through the holistic understanding seems to constitute a counterweight to a narrow medical view of mental ill health (where medicalization is more connected to pathologization). However, it should be noted that the holistic perspective also opens the door to an expanded illness/ill health classification (as compared to the reductionist view). This might imply an expansion of the sphere of ill health. The new public health and the holistic theories seem to be explicit opponents to medicalization (in terms of pathologization), but implicitly they could actually work as a route toward increased medicalization if a societal focus on medical measures and remedies remains prominent. Many types of mental ill health problems could then increasingly be viewed as medical problems even if they were not defined as disease problems. Hence an understanding of health is pivotal for the public health effort.

Table 9 Different theories of health and their relation to public health and their understanding of mental ill health (Study IV)

Health	Mental ill health	Public health
Theory of health as absence of disease	Mental ill health as organic or genetic failure or as a failure of a natural mechanism.	Disease prevention. Health on a more individual level. Often health-care related and disease preventive (screening).
Theory of health as well-being	Mental ill health as an inner state of health-related mental suffering.	Health promotion. Health can be achieved on a societal level, e.g. safe conditions during childhood and adolescence. Enhancing self-confidence and self-esteem.
Theory of health as Balance	Mental ill health as a disrupted balance between the abilities/conditions of the individual and his or her goals in life and the environment.	Health promotion. Health can be achieved on a societal level. Improve the abilities/conditions of the acting subject. Compensating by changing the goals or the environment.
Theory of health as Ability	Mental ill health as not being able to function in society and to reach basic goals, e.g. to lack the ability to take care of oneself and/or to engage in social relationships.	Health promotion. Health can be achieved on a societal level. Enable people to reach their vital goals, by giving them the abilities necessary to enhance their basic abilities through public health policy.

Discussion

Main findings

The main findings of this thesis are:

1. In the KILEN material patients reported experiencing psychiatric ADR symptoms of mental disturbances (sometimes severe) affecting them in many different ways, especially during discontinuation (Studies I and II).
2. These reports suggested a negative doctor-patient interaction (from the patient's perspective) with an indication of a medical encounter dominated by a biomedical focus. This type of interaction risk leads to overdiagnosing of depression and overprescription of antidepressant medication (Study III).
3. According to a theoretical discussion on public health and medicalization, increasing medicalization as a result of excessive diagnosing risks individualizing mental problems and may divert the primary focus from the social and political context of public health.

General discussion

The experience of adverse drug reactions

The studies of the KILEN reports indicated patients signaling experiences of potentially severe psychiatric adverse effects with their antidepressant treatment, especially during discontinuation. In Study I it was suggested that an informant to KILEN on an average reported over five different ADRs per consumer report. This is a high number and, therefore, it may come as no surprise that the great majority of the reporters were dissatisfied with their medication therapy. Only 16 (8.8%) consumer narratives out of the total 181 reports included in Study II contained positive experiences of antidepressant drug treatment. Once again, the results are based on selected material and generalizations cannot be made. Still, these reports are quite consistent with official spontaneous reports made to the Swedish MPA where in 2011, almost half (49.7%) of a total of 597 ADR reports from the general public were deemed serious by the agency [198].

Women reported ADRs to KILEN in a much higher proportion: between three and four times more often than men, and sometimes more within certain age groups, and women accounted for approximately 75% of the reported narratives. This has been shown in other patient reporting systems as well [193, 245-246]. This may be an effect of Swedish women being prescribed antidepressants twice as often as men [56-57]. It may also be due to women's tendency to experience a higher risk of ADRs than men, effects that increase with age and number of drugs prescribed [247]. This could also explain women's over-representation in reporting to non-profit organizations like KILEN. A majority of the ADRs to KILEN (Study I) concerned antidepressants (70.5%) and previous research on spontaneous ADR reporting systems have also shown that ADRs from antidepressants were frequently reported [248], often affecting the nervous and psychiatric system [182]. The performed qualitative content analysis in Studies II and III indicated reports of patients describing their symptoms and suspected adverse reactions as well as the ways in which these experiences affected their lives. The UK qualitative evaluation of its official patient reporting scheme (the Yellow Card Scheme) has shown that reports from patients were

more likely than those from HCPs to include information about symptoms and the impact it had on the patient [191].

In Study I it was suggested that the reported potentially severe psychiatric ADRs gave another perspective of experiences with antidepressants than the information found in the Swedish Summary of Products Characteristics (SPC) (in this case FASS 2004 and FASS 2009). This finding is somewhat congruent with other evaluation systems, where for instance the UK patient reporting system, the Yellow Card Scheme, identified new "serious" reactions not already included in the SPC [191]. For instance the reported **"**sensation of unreality" was a common psychiatric ADR among the consumer reports to KILEN (not listed at all as an ADR in FASS) and numerous KILEN narratives in Study II reported experiencing a kind of blunting affect of the drug. This was mostly described as feeling like a "zombie" and being incapable of having or sharing feelings toward others, even one's own family members. As argued in Study II, it is important to remember that the blunting affect of the drug can sometimes be perceived positively. As previously mentioned, earlier research has shown that antidepressants are often perceived as working by alleviating pain and suffering enabling people to function in daily life activities. Patients whose narratives were positive about drug treatment in the KILEN data often emphasized that the experienced adverse effect of the antidepressant was a price worth paying, since the prior untreated condition had been perceived as much worse.

The problem of discontinuation

According to patient reports to KILEN, discontinuation symptoms of antidepressant medication were reported as especially severe and problematic, but not always mentioned in FASS (if mentioned it was regarded as rare) [249-250]. As indicated in Study I, a large share of antidepressant psychiatric ADRs were reported during discontinuation treatment (19-45%, mean 30.6%). Abrupt cessation of SSRIs is argued to produce withdrawal symptoms in up to one-third of the patients [155]. One complicating factor might be that the disorder treated may also be the source of the problem attributed to the drug. Thus, symptoms produced by discontinuing antidepressant drugs may be confused with relapse of the original disorder, which might cause doctors to resume drug treatment, perhaps at a higher dosage [251]. Since the psychiatric ADRs reported to

KILEN my often occur as a symptom of the illness for which the antidepressant had been prescribed, their (re)appearance might simply suggest that the patient is having a relapse and needs continued treatment.

Research, however, has shown that antidepressant discontinuation in depressed patients can be associated with worsened depression and increased suicidality [252], and that the recurrence risk for depression was much shorter after rapid cessation than after gradual discontinuation of antidepressants [253]. This is crucial to acknowledge, since antidepressant medication in suicide prevention is now considered a major public health concern [254]. Some of the KILEN reports contained narratives describing an increase in suicidal thoughts or of such thoughts recently occurring, both during treatment but also during discontinuation. However, it is often unclear whether suicidal thoughts had been evident before medication started or if they were a direct result of the use of antidepressants. It is also imperative to recognize that suicide is a complex ADR to detect in an antidepressant since people with depression are at a higher risk of suicide than the general population as a result of their depression [73].

Often a variety of study designs are employed to investigate whether exposure to antidepressant drug therapy may have beneficial or harmful effects on the risk of committing suicide [255]. In 2006, the American Food and Drug Administration (FDA) issued a public health advisory warning which led to specific labeled ("black box") warnings to be added to package inserts for antidepressants in order to call attention to the increased risk of suicidal thoughts and suicidality in children and adolescents taking these drugs [256-257]. Further studies have indicated that children and adolescent ought to be followed very closely because of the risk of suicidal thoughts and suicide [258-260] and that this should also entail all age groups [261-262]. This research has, however, been questioned [263-264], and some critics even call these "black box" warnings a public health experiment with unintended consequences [257]. Apparently this is an area of conflicting views but it is nevertheless imperative to emphasize this severe psychiatric adverse effect, since it may have disastrous consequences if ignored.

Long-term treatment

Abrupt discontinuation has been suggested to cause a larger increase in the number of adverse discontinuation symptoms [265-266]. A report from the

Swedish Council on Health Technology Assessment (SBU) indicated that long-term use of antidepressants (particularly in high dosages) could cause these symptoms if treatment is terminated suddenly or the dosage is substantially reduced [267]. This raises questions of the potential harm of taking medicines on a long-term basis and the possibility of medicines masking other symptoms, as indicated in another research [177]. Several KILEN stories included patients reportedly being told by their doctor that their antidepressant treatment could be lifelong, and several patients reported taking antidepressant for many years. According to a study of antidepressant medication in primary care, the Swedish National Board of Health and Welfare found that approximately 30% of Swedish patients had used their antidepressant drugs for more than three years [268]. This is in line with previous Dutch research where almost one-third of the investigated patients became long-term users during follow-up [269]. According to a report from the American CDC, more than 60% of Americans taking antidepressant medication have taken it for two years or longer, with 14% having taken the medication for ten years or longer [120].

Fear of discontinuation symptoms made some KILEN reporters in Study II afraid of ending their treatment; these patients often continued to take antidepressants, despite reporting that they did not want to be dependent on them. A review study from the Nordic Cochrane Centre even suggests that withdrawal reactions to SSRIs are so similar to those for benzodiazepines that it makes no sense to describe only the latter as dependence symptoms [270]. Fear of adverse effects can be a main reason for not accepting SSRI treatment [271], and previous qualitative research has shown that patients are concerned with taking antidepressant medication in terms of ADRs and fear of addiction [131, 133]. This is also of considerable importance because feelings of uncertainty regarding the safety of a drug are an important reason for non-adherence to treatment [272].

Anecdotal and nonscientific reports?

In the past, patient reports of ADRs have generally been dismissed as anecdotal or nonscientific [273], despite the fact that research has indicated the validly of reports of suspected adverse drug reactions (over 70% correct) [274]. The KILEN narratives also indicate that case reports like these may provide some important insight and ought not to be so easily dismissed. Other studies have further shown that patients can distinguish between

suspected adverse reactions and other symptoms [275] and are capable of providing clear descriptions of their experiences and balance the benefits and burden of treatment [190]. The KILEN reporting system may, therefore, allow for a rich description of the adverse experiences, but as indicated in Studies I-III, we must also acknowledge that not all patients report to these systems. As a result, clinical trials need to devise ways to explore patients' experiences more directly than through clinicians' diagnoses and symptom rating scales. Patients' views also need to be collected after the drugs have been stopped, since many effects may be difficult to identify while in a drug induced state [276]. Recognition of these ADRs can prevent misdiagnosis and the worsening of potentially severe iatrogenic disorders [277].

The experience of the doctor-patient interaction

As previously mentioned, sociological research suggests that nowadays a biomedical approach is downplayed in the medical encounter in favor of a patient-oriented perspective. Study III indicates, however, that according to the perceptions and interpretations of the reporters to KILEN, the dominance of the doctor, instead of a patient-oriented perspective, may strongly affect the medical encounter. Even if scholars indicate that a greater emphasis is now placed on the lay person to play a more active role, the diagnostician in the medical setting remains a key arbiter, and the doctor still holds significant jurisdictional authority [278]. Approximately 20% of the patients in Study III reported going to a doctor with a non-specific understanding of why they were seeking help. According to these patients, the doctor often quickly decided on a depression diagnosis without listening to what the patient had to say and also quickly decided on an antidepressant treatment strategy without considering other alternatives. This was reported in several cases regardless of whether or not the patient wanted to discuss some other solution to his or her problem. It has been suggested in qualitative research that patients consult their primary care physician for non-medical problems in the absence of other forms of care, and for that reason they are ambivalent about the efficacy of antidepressants [279]. According to treatment recommendations from the Swedish MPA, all patients with depressive symptoms should be met with understanding and empathy and have the opportunity to talk about their life situation, feelings and experience. They

should receive information about the disorder and its treatment options; this includes information about the effects of a drug and its potential adverse reactions [45].

Diagnosing depression

A medical diagnosis is perhaps most readily recognized as the official label that classifies disease as a medically-related problem, and is the foundation from which sense-making and experiences are crafted [278]. A diagnosis can validate a patient's perception of her symptoms by giving her experience a name, and equally, it can pathologize routine lived experience, such as fluctuations in one's mood [280]. It is important to recognize that the KILEN material only reflects the patients' perception of doctors' views and actions, but other research has indicated that doctors view depressive symptoms in a medicalized way [281]. Study III and previous research as well [279, 282] suggest a possible dissonance in lay accounts of being diagnosed with depression; patients often see their current state of mind as a result of life events and not a mental illness or disorder. A few patients in Study III reported that they protested against a medical understanding of their problem but that the doctor then further stressed it as a medical one, for instance by equating all fatigue-like states with depression. Usually, patients reported not having the strength to argue with their doctor's decisions and instead agreed on the diagnosis presented to them (in this case depression), despite the fact that they did not think or feel that they were depressed, but rather fatigued.

As suggested in Study III, it is imperative to recognize that doctors alone are not to be held responsible for medicalizing patient experiences. They use their medical knowledge and language (as they are trained to do), but all too often they lack the time needed for a more thorough examination of the patient. Doctors experiencing lack of time and other organizational pressures have been shown in other research as well [283]. Medical encounters usually take place within a system where diagnostic handbooks and short form tests are used as a fast way of judging a person's health status, a system that allows and encourages doctors to swiftly choose a diagnosis without a comprehensive investigation of the whole situation surrounding the patient. According to a report from the Swedish Council on Health Technology Assessment (SBU), over 60 different rating scales for diagnosing depression are being used in Swedish health care, and it is unclear if some of them are validated to apply to Swedish conditions [284]. As argued, for instance by

psychiatrist David Healy, guidelines and protocols are now part of an "industrialization of health care" as he calls it [285]. This is not the purpose for which these handbooks were intended. The DSM was issued as a manual for guiding decisions regarding diagnosis, but has more often been used as a steering document for diagnosis. For instance, it is stated in the DSM-IV that, *"It is important that DSM-IV not to be applied mechanically…and are not to be used in a cookbook fashion"* (p. xxxii) [104]. The Swedish National Board of Health and Welfare has indicated that there are deficiencies regarding how psychiatric conditions are diagnosed and documented, which can contribute to both overtreatment of some patients and undertreatment of others [268]. Also the WHO acknowledges that people who are not depressed occasionally are misdiagnosed and prescribed antidepressants [30]. The issue of overtreatment is further strongly connected to both overdiagnosis and overmedicalization [78], as the definition of what constitutes an abnormality gets increasingly broader [286]. Missed, delayed, or incorrect diagnoses can lead to inappropriate patient care, poor patient outcomes and increased costs [287].

Pharmaceuticalization

Various KILEN informants reported their perception of antidepressants as the only thing doctors had to offer them in their consultation for help; a prescription was sometimes even suggested in the beginning of the first consultation. How can this exclusive and rapid focus on drug prescription be interpreted? A prescription in itself symbolizes that the doctor has something to offer, and it also provides a relatively speedy way of ending the medical encounter [288]. This is interesting, since according to the WHO, basic principles of prescribing entail prescriptions not to be issued before a detailed clinical assessment has been completed and not before psychological mechanisms underlying symptoms have been explored [289]. In the medical encounter the doctor may judge it to be more dangerous not to treat someone who may prove to be ill than to treat them when actually there is no need to do so, and as a precaution and in fear of relapse recommend long-term use of medicines [288]. Research has also suggested that the act of prescribing in itself might also suggest a biological basis for a problem [290], and that it appears that doctors are less willing to consider nondrug treatments if drug therapy is available, even when there is no evidence that pharmacotherapy is superior [291].

As previously mentioned and as acknowledged in Study III, the term "medicalization" might not capture this development. Depression has, for example, been a diagnosis for some time now, and instead it is the heightened rate of antidepressant prescriptions that has gained momentum in the last 15-20 years. Depression is, therefore, now instead sometimes described as a diagnosis subject to criticism of over-medicalization and pharmaceuticalization [279]. While the medical profession still consists of the key players who legitimize new diagnoses and establish guidelines, new powerful players such as consumers, insurers and the biotechnological industry have entered the field of medicalization [214], often demanding medical solutions [76]. Some scholars, therefore, now argue that we can speak of a "pharmaceuticalization" of everyday life, as the pharmaceutical industry introduces profitable medicines for a range of daily activities and pharmaceuticals are seen by consumers as "magic bullets" to resolve problems of everyday life [292]. The new technoscience and biomedical corporate enterprises are believed to influence not only how medicine is practiced, but also how technoscientific discourse penetrates the public discourse [200]. According to scholars like sociologist Nikolas Rose, people increasingly have come to understand themselves as shaped by their biology [215] and are beginning to recode variations in moods, emotions, desires, and thoughts in terms of the functioning of their brain chemicals [217]. This also seems to be true for some informants in Study III who described their symptoms and treatment in biomedical terms.

As argued in Study III pharmaceutical advertising, especially direct-to-consumer (DTC) may encourage healthy people to think they need medical attention [293]. In the United States, DTC advertising campaigns of SSRIs have largely revolved around the claim that the drug corrects a chemical imbalance caused by a lack of serotonin [59]. Some patients in Study III reported that their doctor used an analogy of a chemical imbalance in order to describe the need for antidepressant treatment and show that serotonin was something that the patient's brain needed, sometimes for the rest of their lives. This has also been shown in previous research, where doctors told their patients that antidepressants would correct a "chemical problem in their nervous systems" [281], or that SSRI would address "an imbalance in the brain" [294]. Even the Patient Information Leaflet (PIL) for antidepressant medication in the UK has been shown to present the antidepressant to correct a chemical imbalance (in 31% of the cases) [295]. As previously described,

this is a contested understanding of depression and how antidepressants work.

Patients who perceive their depressive illness as caused by a chemical imbalance or personal flaw would be expected to prefer a medication approach to treatment and might not engage in or respond to psychotherapy [296]. The analogy also focuses on problems in the individual rather than in the social environment; it calls for individual medical intervention rather than more collective or social solutions [60]. This is apparent in DTC advertising that rarely focuses on, and, therefore, tends to drown out public health messages about individual factors, such as diet and exercise, and ignore bigger societal issues like social involvement and equity [297]. Marketing by multinational corporations is sometimes even accused of presenting a major threat to public health; children are portrayed as especially vulnerable [298]. This kind of advertising has been accused of increasing the public's likelihood of viewing normal worries as more severe problems and believing that potential sufferers of mental health problems in general should take prescription drugs and consult a doctor or psychiatrist [299]. In Sweden advertising directly to consumers is not allowed, but is done indirectly through doctors. The U.S. experience is, however, important, as the country makes up about half of the world's prescription drug market [300]. Research has suggested that information provided by drug companies (for instance journal advertising and funded clinical trials) led to an increase in prescriptions of the promoted drug [301]. The expansion of the pharmaceutical market is, therefore, one important dimension of pharmaceuticalization [70], where drug companies represent a global economic interest with a commitment to maintain and promote medicalized individual interpretations and responses to distress [302]. There is, however, no point in demonizing drug companies, since they do what they are intended to do, and that is to make a profit [7]. They compete against each other and play by the rules we set as a society [73].

As mentioned in Study III, another problematic issue in pharmaceuticalization is ghostwriting [7, 66, 70]. This refers to academic articles that are written covertly by a commercial writer employed by a pharmaceutical company; the articles carry an academic's name on it to give it the impression of independence and scientific rigor [73]. A study from 2011 showed that 7.9% of the papers in six leading medical journals were ghostwritten [303]. A large proportion of clinical trials literature in pharmacotherapeutics seems to be managed through so-called medical

writing agencies [304]. This practice may foster an agenda where pharmaceutical companies write scientific articles in order to promote a certain drug treatment for a medical condition. There is also the issue of non-publication of trials or exclusion of relevant data from published trials, which runs the risk of leading to inaccurate recommendations for treatment [305]. Selective reporting (for example, publishing more favorable results for the protocol population when the pre-specified population for analysis had been the intent to treat the population, or vice versa) has been shown to be a major cause for bias, implying that any attempt to recommend a specific SSRI from the publicly available data is likely to be based on biased evidence [306]. Cochrane's studies have shown that trials with positive findings are published more often, and more quickly, than trials with negative findings [307] and that industry-sponsored drug studies more often had favorable results [308]. Thus, we must be aware of selective publications that can lead doctors to make inappropriate prescribing decisions that may not be in the best interest for either the patients or the public health [309]. However, the European drug agency sets out plans to publish clinical trial data from 2014 reflecting the agency's move toward a more proactive publication policy [310]. Greater openness and transparency with respect to all intervention studies is needed [305].

Talk therapy

In Study III several patients reported the desire to talk someone, but were instead offered antidepressant medication. Psychotherapy is, however, usually harder to obtain through a public health system or health insurance scheme [6]. An argument often heard is that this kind of psychotherapy is not as effective as cognitive behavioral therapy (CBT) and pharmaceuticals. In addition it is argued that there is no empirical evidence for psychotherapy and its effect on mental ill health [141]. According to a report from the Swedish Council on Health Technology Assessment (SBU), there are several types of psychotherapy that have been shown to be effective for treating major depression in adults [267]. Furthermore, according to treatment recommendations from the Swedish Medical Products Agency, psychotherapy is equivalent to psychotropic medicine for mild and moderate depressive symptoms [45]. Lately, different meta-analysis studies have indicated that short-term psychodynamic psychotherapy is effective in the treatment of depression in adults [311]. Furthermore this research has

indicated that long-term psychodynamic psychotherapy indeed is an effective treatment for complex mental disorders [312] and that adding psychodynamic therapy to antidepressants might benefit depressed patients [313]. It is, however, necessary to also understand that different psychotherapies may produce negative and iatrogenic effects, e.g., the worsening of patients' conditions [314-315].

Power imbalance

Several patients in Study III wanting "someone to talk to" reported being reluctant to use antidepressant treatment, and many felt forced to follow the doctor's wishes. Previous research has suggested that patients rarely say that they do not trust their medical practitioners or that they feel unheard, manipulated, and dissatisfied with the medical care they have received [316]. Even if patients are opposed to medication, research has shown that they rarely express this to their doctor [283]. As argued by Freidson, to question one's doctor is to show a lack of faith and justifiable grounds for the doctor to threaten to withdraw his services [212]. For instance some patients in Study III reported that their doctor threatened to not initiate or withdraw their sick-listing unless they agreed to antidepressant treatment. These issues have been highlighted in previous qualitative research where patients felt coerced into taking medicines [177] implying a power imbalance [317]. Indeed, the power situation in the medical encounter might lead to patients not feeling comfortable in rejecting treatment offered by their doctor. Also, some patients in Study III perceived sick-listing as the doctor's bargaining tool in order to get them to accept antidepressant drug treatment. As argued by Freidson, the only real sanction the expert has over the client is the threat to withhold service [212], and the doctor may, therefore, act as the gateway to sick leave and disability payment [7]. However, one must not forget that the clinical consultation is a transaction between two parties separated by differences in power, both social and symbolic [75, 175]. Patients have typically been submissive toward medical authority, accepting medical advice on trust, lacking the expertise to question it, and often accepting a culture in which drugs are viewed as the appropriate remedy for a range of ills [318]. Deborah Lupton argues that while we continue to look to medicine to provide help when we are ill, we also express resentment at the feelings of powerlessness we experience in the medical encounter [319]. Proponents of the medicalization critique call attention to the notion that patients in general

(because of their lack of medical knowledge) are placed in the position of vulnerable supplicants when they seek the attention of doctors with consequently little opportunity to challenge doctors' decisions [319]. It is necessary to distinguish between medicalization and medical dominance, however, which can be a part of medicalization but is not identical to it [220]. When doctors do not listen to their patients in the medical consultation and do not recognize their story, this is medical dominance in action; medicalization is the solution to the patients' problems in terms of diagnosis and treatment.

Trust

Trust was an important issue in Studies II and III as suggested by the performed qualitative content analysis. In Study II trust was often replaced with distrust of the doctor when he or she (1) did not inform the patient about potential ADRs from antidepressant medication, (2) did not acknowledge patients' suspected ADRs and (3) did not monitor treatment and make follow-up appointments. According to several patient reports, there were sometimes problems of separating the symptoms related to the diagnosed depression from the suspected adverse reaction, where patients almost always interpreted negative experiences as belonging to the drug while the doctor construed them as evidence of the initial depression recurring. This was especially present during discontinuation. Some patients reported to KILEN that they experienced discontinuation symptoms over a longer period of time, which they perceived as being dismissed by their doctor. Patients have witnessed dismissive attitudes among health care professionals in other patient reporting systems as well, e.g., the UK's Yellow Card Scheme [246]. Swedish research has shown that patients with psychiatric disorders reported feeling wronged to a higher degree than patients with somatic disorders [320], and that feelings of doctors' nonchalance and disrespect are powerful explanations as to why patients feel mistreated [321]. This may risk influencing the patient's entire experience of the medical encounter in a negative way. Also in Study II, a lack of trust toward the treating doctor made some patients attempt to discontinue their antidepressant treatment on their own, sometimes abruptly, leading to severe adverse symptoms as a consequence. An important aspect of patient reporting is, therefore, that it also often reveals how (much) people cannot or

will not communicate with their doctors, and how patients often feel that doctors will not listen [188].

As discussed in Study II, when patients do not receive information about potential adverse reactions, this could, in fact, be a consequence of the doctors themselves not being fully aware of the potential adverse reactions related to the drugs they prescribe. A comparative prospective cohort study on information quality in Canada, France and the United States showed that in all sites doctors were rarely informed about serious adverse events when informed by pharmaceutical sales representatives [322]. It is indeed worrying that the patient information leaflet (PIL), which accompanies antidepressant medication, does not always warn of discontinuation symptoms [295]. An American study even showed that current medication guides are of little value to patients, as they are too complex and difficult to understand for individuals with limited literacy [323]. According to the Swedish National Board of Health and Welfare, an evaluation of the effect of the prescribed antidepressant is the most important measure to minimize risks [268]. The treatment should be reviewed on a regular basis so that the patient does not continue to take a drug without clear indication. According to a study of antidepressant medication in primary care, however, the agency found that only 40% of Swedish patients had a follow-up appointment, and more than 60% of them had used antidepressant drugs for over a year [268].

Patients need honest information about the uncertainties of medical knowledge [324]. When patients experience potentially severe adverse effects, robust and clear communication between the doctor and the patient is (as indicated in Studies II and III) of foremost importance. Informing patients about their medications and potential ADRs is important in order to avoid dissatisfaction [325], so that they can decide whether or not to take (or continue to take) the prescribed drugs [295]. Improved communication of doctors with their patients may also further stimulate ADR reporting [326]. Doctors with good communication and interpersonal skills will probably be able to detect problems earlier. Additionally, they can prevent medical crises and expensive interventions and provide better support to their patients [327]. Previous Swedish studies have indicated that long-term sick-listed patients' self-estimated ability to return to work was significantly facilitated if the medical encounter was perceived as respectful [320]. Conversely, negative encounters seemed to have a negative impact on patients' trust in health care [328]. Previous research has shown that trust meant trust in the personal integrity of the doctor and his or her medical competence and

expertise [329], an issue that was highlighted as important in Studies II and III. According to the Swedish Council of Health Technology Assessment, one way to improve doctors' prescriptions for antidepressants (and to also reinforce primary health care) is to appoint a specially trained "care manager" (for instance a nurse) with the responsibility of supporting and providing continuous contact with patients diagnosed with depression as well as training personnel [330].

Public health and depression

As Dubos argues in his classic book *Mirage of Health,* the myths of Hygeia and Asclepius symbolize the never-ending oscillation between two different points of view in medicine: health as the natural order of things and health as something to be restored by correcting an imperfection [331]. The modern followers of Hygeia can be understood as practitioners of public health and the medical professionals as followers of Asclepius [332]. It is sometimes argued that with the exception of the specialties of public health and family medicine, the focus of modern medicine is mainly on the individual patient, rather than relating their situation to their families, communities or the wider society [75]. However, while public health medicine has long engaged in strategies of disease prevention and health promotion, individualized and pharmaceuticalized practices of risk are argued to have become a central dimension of the politics of life in the twenty-first century [217]. Proponents of the biomedicalization theory also contend that growing pharmaceuticalization reflects increasingly sensitive clinical diagnostics that have facilitated discovery of more people needing drug treatment [70]. Risk and surveillance are aspects of biomedicalization that affect each of us and entire populations through constructions of risk factors rendering us ready subjects for health-related discourses [216]. Increasingly we have come to regard simply being at risk of future disease as being a disease in its own right [10].

Risk of overdiagnosis

Diagnostic labels now go beyond disease itself to include risk factors for disease, sometimes giving rise to a new source of social identity, namely a pre-disease [278]. This is what critics argue is underway with the

introduction of preconditions for major depression in DSM-5 [72, 113]. Focusing on preconditions for disease may further increase what the German sociologist, Ulrich Beck, has called the "risk society" [333] and in a global approach "world risk society" [334]; a society structured through individualization where a social crisis appears as an individual crises, no longer perceived in terms of their rootedness in the social realm. Thinking of depression in terms of risk is related to the problematization of depressive illness in the population and as a public health issue [335]. By trying to assess potential risk factors for disease and disorders at earlier stages, the concepts of illness and risk may become increasingly blurred [60]. Concern for the harm and costs of overdiagnosis and overtreatment is now gaining momentum, as the discussion of risk assessment and suggestions of pre-disease progress in the scientific debate [336-337]. One pathway to overdiagnosis can be through disease boundaries being widened and treatment thresholds lowered to a point where a medical label and subsequent therapy may cause people more harm than good [10, 78]. It is even suggested that only one-third of patients with depression are estimated to respond fully to antidepressant medication [338]. A Cochrane review indicates that for every person who benefits from antidepressants, seven gain no benefit [339]. Masking a very modest efficacy of some drugs by reference to the official technoscientific evidence can lead to questionable acceptance of risks to public health in regulatory decisions [300]. Although the KILEN reports are a selected material, there is still an indication of individuals not benefiting from antidepressant treatment, and this must be seen as problematic. Despite conflicting views regarding treatment, one must not forget that if normal events are misdiagnosed as depression, this will risk leaving those who are depressed untreated (extended waiting lists to health care, wrong medications or lack of resources) and thereby create undertreatment and overtreatment simultaneously.

As previously argued, the KILEN material is by no means representative for generalization to a population, but with these reports in combination with the fact that antidepressant consumption has risen in an unprecedented way, there are some justifications for at least acknowledging the warning signs. This development may result in a great socioeconomic impact to both health care and public health and, therefore, should be thoroughly investigated. In the United States it has been estimated that between $158 billion and $226 billion was wasted on overtreatment in 2011 [340], and Conrad and colleagues estimated the cost of medicalization in the U.S. at $77 billion in

2005 or 3.9% of the total domestic expenditures on health care [341]. Thus, overdiagnosing depression "just in case" or because of a risk assessment may take its toll both health-wise and financially. One study found overdiagnosis and overtreatment of depression to be common in community settings in the U.S. [342].

The potential for cumulative burden from overdiagnosis is further argued to pose a significant threat to human health [10]. Not only may it lead to adverse effects of unnecessary labeling and harms of unneeded tests and therapies for the individual, for society there is the expense of unnecessary treatment and the diversion of scarce resources away from people who need it to those who essentially do not [10, 72]. By including people with mild problems in estimates of mental illness, we risk losing support for treating those people who have legitimate disorders [78]. Some speak of a pharmaceuticalization of public health since a "magic bullet approach" is applied to complicated health challenges regardless of the health infrastructure [343]. As argued in Study III, a magic bullet approach may have its merits but can also jeopardize treatment by failing to see the big picture. Aspects of consumerism, together with industry promotion, medicalization and deregulatory state policies are now found to be drivers of pharmaceuticalization in ways that are largely outside (or suboptimal for) significant therapeutic advances in the interest of public health [70].

Once regarded as passive victims of medicalization, today patients can hold vital positions as advocates, consumers, or even agents of change [344]. Patients and consumers may, therefore, actively and willingly collaborate in processes of pharmaceuticalization, particularly when much needed help is sought [218]. It is imperative to acknowledge that a diagnosis serves an administrative purpose, as it enables access to services and status [221], and most medical encounters seem to work on the assumption that the doctor can offer some worthwhile service by diagnosing illness and, more importantly, curing it [345]. A diagnosis is also becoming increasingly essential in order to obtain access not only to medical treatment, but also to receive support within (for instance) the education system, at least in Sweden. Maybe we ought to ask ourselves if it is really the responsibility of the doctor and the health care system to handle everyday problems or whether people turn to these institutions because they have nowhere else to go? Are we building a kind of health care reasoning in normal social processes on a structural level?

The devil in the details

Maybe, the devil is in the details. The one in four figure for mental illness prevalence, widely quoted as it is, has an unclear origin [64]. Is it even reasonable that 27% (or 38% depending on how many disorders are included) of the European population is estimated to suffer from mental disorders? Or that approximately 8.5% of the Nordic population is prescribed antidepressant medication? Does it instead tell us something about the contemporary global community and our view of health and ill health? Despite the fact that the Nordic countries all have a low prevalence rate of depression (compared to other countries), they have at the same time a higher antidepressant consumption than the OECD average. As previously mentioned, Iceland has by far the highest consumption of antidepressants, and according to Icelandic research, this may be a result of their perceived effectiveness by users, but also an effect of limited access to alternative treatments such as psychotherapy [346]. Icelandic research has suggested that despite an increase in antidepressant usage, there has been no positive impact on public health; instead the rates of psychiatric outpatient consultation and in-patient treatment for depressive disorder increased, leading to increased medical costs [164]. From a public health perspective, this medical approach is questionable. Also of importance is the potential influence of gender and cultural accounts for the medicalization of mental ill health; research needs to go beyond biology to explain why women are twice as likely as men to become depressed and to be prescribed antidepressants.

Critics indicate that we are marching toward "Pharmageddon," a kind of fast health care [7], producing more ill health than health [347]. Pharmageddon is a gold-standard paradox: individually we benefit from some wonderful medicines while collectively, we are losing sight and sense of health [348]. Even the WHO acknowledges that there may be shortcomings and at times conflicting interests within the pharmaceutical industry when dealing with public health concerns arising from drug safety issues [171]. Pharmaceuticalization can be a strategy to accomplish what people individually or collectively may perceive to be in their best interests, but at the same time this strategy may promote pharmaceutical treatment as the solution for social problems [349]. In an aging global population with more chronic ill health and higher medicine consumption, this will be particularly important. Today it is estimated that 893 million people of the global community are 60 years or older, a number that will almost triple to 2.4

billion people by 2050 [350-351]. Maybe, raising doubt about the safety of drugs will be powerful enough to reduce pharmaceutical prescriptions [70].

The social determinants of health

There is now widespread recognition within the public health community of the broad determinants of health [352], and maybe it is time for public health research to broaden the perspective by looking at the social determinants of health [353], the so-called "causes of the causes" [354], as suggested by the WHO Commission on Social Determinants of Health (CSDH) [355]. To act as the Commission did and focus on the causes of the causes to ill health, instead of disease or illness, was highly controversial and was indeed an important step in public health [356]. In Sweden the so-called Malmö Commission (Commission for a Socially Sustainable Malmö) drawing on the findings from CSDH has since 2011 worked to assemble evidence that will be used to propose strategies for reducing health inequalities and for improving the long term living conditions for the citizens of Malmö [357]. Low socioeconomic status has in Swedish research been shown to be a predictor of a diagnosis of depression [358] and research has shown that the long-term risk of depression appears to follow a socioeconomic gradient; individuals in the lowest occupational groups are most likely to be depressed and to have depression that persists over time [359]. Both poverty [360] and unemployment [361-363] appear to be highly connected to subsequent depression. Economic crises can have severe effects on a wide range of determinants of individual and population health [364]. Several predictors related to socio-demographics, sickness absence and health consumption have been identified as risk factors for suicidal behavior; risk factors of both clinical and public health importance [365].

The public health effects of the current economic crisis are already visible, particularly in the countries most affected by recession; however, Iceland has so far avoided negative health effects [366]. There is, for instance, research suggesting that the European economic recession has increased the frequency of major depression in Greece [367]. Even more serious are the indications of a connection between the financial crises and increasing suicidal rates in Greece [369-370], Ireland [371], England [372], and in the U.S. [373]. There are also indications of a connection between the Swedish financial crisis of the 1990s and an increased mortality, including suicide [374-375]. Reducing social and economic inequality may be one way to

reduce the incidence of depression and other mental illness [376-377]. With a high unemployment rate in the Euro area [378] depressive states will most certainly rise, but a medical remedy as a panacea for the problem is probably not the best solution to a political problem. It is, therefore, important to become more aware of the way in which structural and cultural features of societies, linked to politics and economy, generate difficulties for individuals and to attempt to change these features [6]. As argued by others, participants in health policy must remind citizens and policymakers that the lack of access to health care is not the fundamental cause of health vulnerability or social disparities in health [379]. The government is a central player in public health because of the collective responsibility it must assume and implement [380]. It is within the context of power and politics that the public health community operates. Public health concerns more than medicine, and ought to involve decisions and actions on a societal level. As argued in Study IV, governments and political solutions have played an important role through the history of public health and must continue to do so.

The importance of a common language

Depression also raises questions about the nature of the disease concept, the extent of its application, and the differences between the idea of a disease and the experience of illness [65]. As argued in Study IV, there are two quite different views on public health: a more narrow medical view and a broader more socially oriented one. These views have certain connections to the different theories of the meaning of health. Both paradigms may have practical consequences for public health work [381], but a reductionist view of the meaning of health seems to lead to more medical public health. Different understandings of the meaning of health also reflect differences in how to interpret disease and illness, and changes and variations in official categories and instruments can create enormous problems in the attempt to determine whether mental illness has increased while mental well-being has declined. These semantic issues can have vastly different implications for the use of drugs as a treatment response [125]. A narrow model of public health may have trouble identifying underlying causes of ill health and depression. It is the very kinds of policies that are typically deemed to be outside the ambit of a narrow model of public health that are those most needed and most likely to improve public health [382]. The “new” public health is typically represented as a reaction against both the individualistic and

victim-blaming approach of health education and the curative model of biomedicine [383]. As argued in Study IV, the new public health and the holistic theories seem to be explicit opponents to medicalization (in terms of pathologization), but implicitly they could actually work as a route toward increased medicalization if a societal focus on medical measures and remedies remains prominent. This might imply an expansion of the sphere of ill health. Many types of mental ill health problems could then increasingly be viewed as medical problems even if they were not defined as disease problems.

A common language of health and ill health is essential in order to facilitate the identification of a public health problem, the development of a shared vision and the formulation of an appropriate response [384]. This is especially important since public health terminology and underlying concepts seem to vary among the member states of the European Union [384], and it appears there is no common approach to support public health research across Europe, with significant gaps in organization and funding [385]. Therefore, and as argued in Study IV, deciding on which perspective of health and ill health to use is of great importance in order to address these matters efficiently. Referring to something as a public health problem can often serve implicit normative or political purposes [89]. This is all well, but unless the characteristics of health are clarified and agreed upon, public health professionals could be working with different definitions of health, giving rise to an incoherent field and conflicts [311]. As reasoned in Study IV, different definitions of health may contribute to medicalization in different ways [90]. Unraveling such confusion could lead to a more optimal distribution of WHO's health resources [12].

Studies I-IV in a medicalization perspective

In this thesis some aspects of medicalization theory are used as a theoretical frame of reference. Studies I-IV will now be summarily evaluated according to the perspective of medicalization as iatrogenesis, medical dominance or overdiagnosis. Studies I and II showed that patients reported experiencing symptoms of mental disturbances (sometimes severe) affecting them in many different ways, for instance, psychiatric ADRs not always acknowledged in the Swedish *Physicians' Desk Reference*. Illich referred to therapeutic side effects as "clinical iatrogenesis" [201]. The potential risk for overdiagnosis in the medical encounter may also be an indication of clinical iatrogenesis, as well as the expansion of diagnostic categories. As argued by others, the expansion of diagnostic categories is not without risk and can have severe iatrogenic results [221]. Clinical iatrogenesis may also be connected to medical dominance as indicated in Studies II and III, but especially in Study III when patients reported that they felt forced to accept pharmacological treatment.

Illich argued that "social iatrogenesis" is at work when health care is turned into a standardized item, a staple, when all suffering is "hospitalized" and people are encouraged to become consumers of medicine [201]. As Argued in Study IV, it is vital to question the projected increasing number of depression and especially the issue of cause and effect. If depression is to be handled as a global public health problem, perhaps it should not be viewed as an entirely medical condition, thus leading to social iatrogenesis. Pharmageddon is defined as, "the prospect of a world in which medicines produce more ill health than health, and when medical progress does more harm than good" [347]. This can be seen as an embracement of Ivan Illich, but also an extension of his focus on the risks of medicalization.

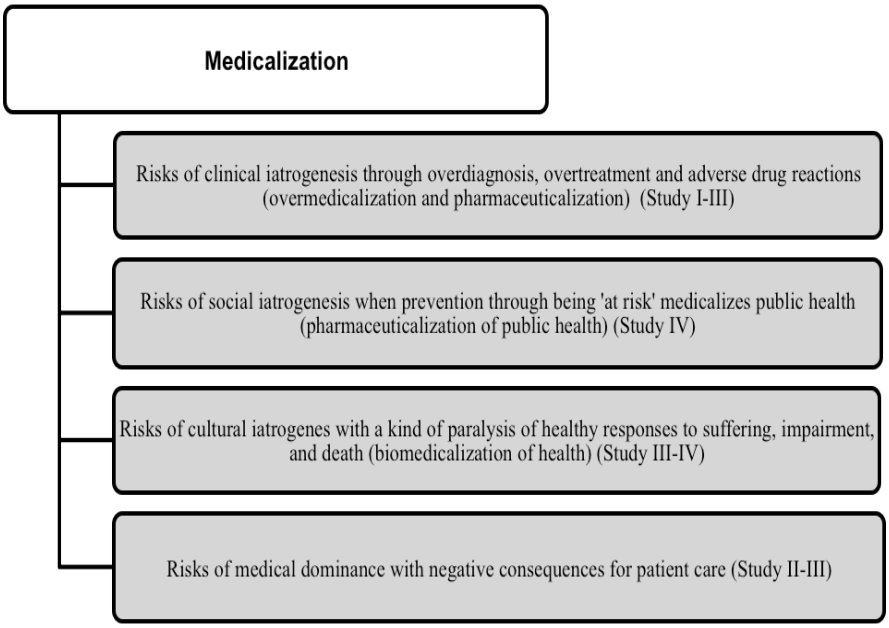
Lastly, there is the level of cultural iatrogenes, which Illich argued to be a kind of paralysis of healthy responses to suffering, impairment, and death. Patients themselves now have become accustomed to thinking about themselves through the voice of medicine [317]. Nikolas Rose argues that human beings have over the past half century come to understand and speak about themselves, and others, as beings shaped by biology [215], and that medicalization, in fact, has made medicine inextricably intertwined with the ways in which we experience and give meaning to our world [217]. As previously indicated, a biomedical language with a magic bullet approach

might promote drug treatment and distort public health approaches, for instance, political changes. Medicalizing a problem may, therefore, minimize or shift the burden of broad socio-political conflict around sensitive issues [386].

These effects are all negative aspects of medicalization as interpreted by Conrad and Schneider [208]. A potentially positive aspect of medicalization would be that people might get help when being diagnosed in the medical encounter. It is important to acknowledge that a diagnosis can provide patients and relatives with an explanation of the individual's feelings and behavior, helping them to make sense of the experience [6]. A theory of a chemical imbalance can reduce the blame attached to the condition, but these theories can also foster negative perceptions and stigma, making those diagnosed feel that the condition is difficult to change and will be ongoing [6, 302, 387]. Relieving people of responsibility for how they feel can also result in a sense of powerlessness [129]. As argued by Illich [201] and Freidson [175], this can be highly problematic when it extends to medical dominance, overdiagnosing and harm from ADRs. The drawbacks of overdiagnoses include the negative effects of unnecessary labeling, the harm of unneeded tests and therapies and the cost of wasted resources that could be better used to treat or prevent genuine illness [10].

If we revisit the figure introduced in the theoretical section, we can by summarizing Studies I-III conclude that consumer reports of antidepressant ADRs is one way to analyze the experience of medical treatments and the medical encounter (clinical iatrogenesis), while Study IV problematizes societal aspects of ill health and medicalization (cultural and social iatrogenesis) (see Figure 5). By combining a public health perspective on an issue that is usually understood as a clinical matter (ADRs) with a medicalization theory it is possible to amplify the analysis, to move from a clinical perspective to a social and cultural one. It is imperative to get the full picture, since almost one-tenth of the populations in the Nordic countries are prescribed antidepressant medication.

Figure 5 Studies I-IV and their relation to medicalization



Methodological considerations

In this thesis both quantitative and qualitative research methods were used, and different quality criteria had to be followed. Using only basic statistical methods, instead of trying to perform more advanced statistical methods than the self reported material would be suited for, ensured validity and reliability. However, generalizability from this selected material cannot be made. The basic quantitative analyses were crosschecked by two of the researchers (AV and AC). The qualitative analyses were performed with the quality criteria of Lincoln and Guba [238] in mind. According to Golafshani [237], examination of trustworthiness is crucial in qualitative research. In Studies II and III the number of narratives of patients' experience with the medical encounter should help strengthen the trustworthiness, but also since

three of the researchers (AV, TS and AM) crosschecked the data. More specifically credibility was obtained through the qualitative content analysis performed in Studies II-III by scrutinizing patients' experiences of depression, treatment, ADRs and the overall doctor-patients relationship. Including a relatively large sample of self-reported material in Studies I-III provided a strong demographic distribution and representation of age and sex, but as mentioned, it made it difficult to generalize or transfer to other populations. One could argue that every qualitative analysis in itself is unique, but all researchers crosschecking the data hopefully dealt with dependability and confirmability. Reflexivity, that is the process of reflecting critically on the self as a researcher [236], was permanently present during the thesis project.

There are, however, certain general limitations with this thesis and a risk of potential sampling and selection bias. The literature for Study IV was selected in a non-systematic manner with the risk of missing out on valuable material. However, the intention was to include articles, policy document, reports and guidelines commonly used and referred to. The KILEN data for Studies I-III was based on spontaneous consumer reports and thereby was selected material, which might have exaggerated the negative views and experiences of antidepressant drug treatment. Thus, it is unlikely that all views and experiences of antidepressants have been captured. In addition, a person complaining to a consumer organization has been well enough to initiate a submission of an online report, suggesting that the reporters may have clinically less severe depressions. Therefore, it is also not surprising that this particular group does not describe severe depression. Because it is an Internet-based reporting system, it most likely will benefit younger individuals who are used to handling a computer, but by missing the older age groups' experiences, one risks getting a biased view of patients' experiences of treatment. Still, one must recognize the experiences that the individual reporters share; their experiences signal that there is something worth being studied closer for further assessment.

Furthermore, prescription sales are used as a measure for exposure to antidepressants, but we do not know the number of individuals treated [161]. For instance, a fourfold increase in antidepressant sales does not imply that four times as many individuals are being treated. Antidepressant medications are, for instance, also used in treating anxiety and eating disorders. Adverse events and reactions are often revealed first when pharmaceuticals are taken by large groups of people over a long period of time. The possible strength

of a public health perspective is that it widens the perspective, allowing for new knowledge of the meaning of depression as a public health problem.

It must also be acknowledged that patients may respond to and metabolize drugs differently, and that some individuals may be especially prone to specific adverse reactions [388]. In Study III we must recognize that data were recorded between 2002 and 2009, so some patients' experiences of the medical encounter may be older than 2002 and some reports refer to older guidelines in health care. Furthermore, in Studies II and III we do not know how consumers/patients were "officially" diagnosed with depression (ICD-10, DSM-IV or other), and we do not know if the reported diagnosis was a "valid" one, because we have only patients' own reported experiences to the KILEN website. It is also important to understand that this was only the patients' perception of ADRs and of the medical encounters, so we cannot compare doctors' perceptions. Although the important information from the narrative reports stands as valid for those who reported, there is not a denominator to provide information about the frequency of such experience. Lastly, there is the question of potential problems with polypharmacy, with an unknown interaction between psychotropic drugs, for instance, different antidepressants and anxiolytics. Hence, it is difficult to know if the reported ADR is a result of a particular medication or a combination of a number of medications. As indicated by a Swedish study, the prevalence of polypharmacy, as well as the mean number of dispensed drugs per individual increased year-by-year in Sweden from 2005 to 2008 [389]. Despite the limitations of this material, the data are of value because the material provides unique information about consumer reporting (in Sweden) and patients' experiences of antidepressant treatment and ADRs. The personal reports constitute qualitatively unique and strong material concerning the lived experiences of antidepressant treatment and the medical encounter.

Conclusion

This thesis had a twofold aim. The first aim was to describe and analyze experiences with antidepressant treatment for depression as expressed in consumer reports to the Swedish non-profit organization KILEN. In particular, the problems the KILEN reporters describe (Studies II and III) appear to relate to:

1. Diagnosis of depression too swiftly.
2. Initiation of drug therapy instead of other therapy without discussion.
3. Severe psychiatric ADRs, especially during discontinuation.
4. Poor care in general, e.g. lack of information for the patient and lack of monitoring of treatment, leading to a lack of trust in the doctor and health care in general.

As indicated in this thesis consumer reporting may be one vital way to safeguard public health by collecting as many views and experiences as possible in order to get a fuller picture of treatments given; the more data the better, especially since drug sales continue to rise. Many eyes are valuable for spotting problems. This can have significance for public health; patient and consumer reports describe the burden of ADRs for individuals, which is a major health component that is missing from public health estimates of disease burden in populations [180]. Consequently, drug safety is an important part of public health and in order to prevent patients from being harmed by their treatment, it is essential to capture the reality of what is actually occurring with the patient. A biochemical understanding of mental ill health may be embraced, because it relieves people of responsibility for their circumstances, but relieving people of responsibility can also result in a sense of powerlessness. This may contribute to a questionable medicalization and/or pharmaceuticalization of depression. Increasing drug treatment risks increases in health care costs and harm from adverse drug reactions. Hopefully the new European pharmacovigilance legislation will

further increase patient influence, and improve pharmacovigilance and public health. Thus, it is essential to challenge communication problems and to ensure a safer prescription culture.

The second general aim of the thesis was to conduct a theoretical discussion by looking at broad societal changes to determine the significance of mental ill health as a great public health problem with special attention to medicalization. This was done through the focus of medicalization theory and taking into account broader societal changes by looking at relevant and important literature in the field of health, mental health, public health and medicalization. This identified certain understandings of public health connected to different understandings of the meaning of health and ill health (narrow or broad). If depression is going to be viewed as a growing public health problem, there needs to be a distinction between ill health problems that are medical problems and those that are not. Otherwise, the predictions of depression as a global public health problem might lead to a pharmaceuticalization of public health leading to increasing health care costs with unnecessary harm from adverse events. Lack of awareness of drug risks may lead to misdiagnosis, overdiagnosis and prescribing a large number of unnecessary drugs. This may lead to harm from ADRs, harm that could be avoided. Overdiagnosis and overtreatment may in turn lead to diminished trust in the health system. Overtreatment, especially when it results from "disease mongering," is a persistent and troubling issue [390]. Increasing medicalization furthermore risks individualized mental problems that may have other sources and thereby moves the focus away from the social and political context of ill health, for instance poverty and inequality. An emphasis on pharmaceutical products may divert attention from not only other approaches to health care such as psychotherapy, illness prevention, and not least general public health interventions, but also wider structural and political factors. Hence, it is vital not to reduce peoples' experiences of mental ill health to an issue of brain chemistry (a biomedicalization of health); public health ought not just evolve around public ill health. Arguments for increased medication must be related to a possible danger of medicalizing social problems and life crises. For the sake of public health, it is, therefore, crucial to patrol the boundaries of medicalization, especially those of pharmaceuticalization in order to safeguard the health of the public as something going beyond health care.

Future research

Based on the findings in this thesis, some areas of interest for future research have been identified:

- To conduct a comparison between consumer reporting systems, especially within the EU and to follow-up on the new pharmacovigilance legislation. The Swedish Medical Products Agency offers the opportunity for the consumer to use free text in describing the reactions. However, these descriptions have not been subjected to qualitative analysis, or been published, and ought to be scrutinized and compared with other material, for instance the KILEN reports as well as other countries' reporting systems.
- To perform a comparison between patients and HCPs interpretation of symptoms.
- To perform more comparative research between the Nordic countries. As indicated in this thesis, the Nordic countries differ in depression prevalence and antidepressant consumption, but the reasons for this are unknown.
- Lastly, to further scrutinize the medicalization thesis. The medicalization thesis has now been around for some time, and as indicated in this thesis, there are now also new concepts like pharmaceuticalization and biomedicalization as a way to differentiate to the often too inclusive concept of medicalization. A theory is something that constantly needs to be updated and, therefore, there is a necessity for a study scrutinizing the medicalization thesis in order to relate it to contemporary issues of, for instance, public health.

These are all questions for future research and researchers to resolve.

Sammanfattning på svenska (Summary in Swedish)

Avhandlingen utgår från förhållandet att symtom på psykisk ohälsa har tenderat att öka över tid i exempelvis de undersökningar som görs regelbundet av hälsorisker och ohälsa i form av olika så kallade folkhälsoenkäter och liknande undersökningar av hälsoläget i den svenska befolkningen. Det finns en diskussion bland forskare kring vad denna tendens står för, exempelvis om diagnosticerad psykisk sjukdom som depression ökar i motsvarande takt. Samtidigt har farmakologisk behandling av depressionstillstånd ökat med motiveringen att modernare behandlingsalternativ är effektivare och har mindre besvärande biverkningar. Nedgången av självmord, utom i de yngsta åldersgrupperna, har tagits som intäkt för en positiv effekt av detta.

Kritiker av den ökande farmakanvändningen har emellertid hävdat att denna utveckling snarare står för ökande marknadsföringsinsatser av denna typ av läkemedel, där evidensbasen är bräcklig, särskilt avseende den vidgning av kriterierna för att sätta in denna typ av behandling, som skett i praktiken. Till följd av detta, hävdar dessa kritiker, sker en medikalisering av symtom på psykisk ohälsa som leder till en klyfta mellan patienter och behandlare, och till en onödig ökning av biverkningsfall av dessa preparat, samt till att bakomliggande samhällsproblem blir definierade som individuella hälsoproblem. Avhandlingen består av fyra delarbeten. Det övergripande syftet med avhandlingen är tvådelat. Dels att beskriva och analysera patienters erfarenheter med antidepressiva läkemedel som behandling för depression, utifrån hur dessa uttrycks i biverkningsrapporter. Vidare att föra en diskussion om vad det innebär att psykisk ohälsa är ett stort folkhälsoproblem. Detta görs genom att inrikta sig på breda samhälleliga förändringar med särskilt fokus på medikalisering.

I det första delarbetet analyseras 442 rapporter avseende biverkningar av antidepressiva läkemedel som skickats in av patienter till den svenska

konsumentorganisationen KILEN. I artikeln analyseras denna information med syftet att värdera om denna typ av data kan bidra till förståelsen av fördelar och nackdelar med antidepressiva läkemedel ur ett brukarperspektiv. Informationen analyseras med avseende på typ av läkemedel och rapporterad biverkning fördelat på sociodemografiska bakgrundsdata. Slutsatsen är att denna typ av information kompletterar den bild man får av det redan etablerade offentliga systemet för biverkningsrapportering.

I det andra delarbetet utvidgas analysen av biverkningsrapporterna till konsumentorganisationen KILEN genom en kvalitativ analys av den fria text som 181 uppgiftslämnare bifogat till de kvantitativa uppgifter som låg till grund för delarbete I. Den metod som användes för detta var innehållsanalys (content analysis). De övergripande teman som extraherades med denna metodik var: ”Erfarenheter av läkemedelsbehandling” (allvarliga psykiska biverkningar och abstinenssymptom), ”Bristande kommunikation” och ”Tillit och bristande tillit”. Slutsatsen var att även denna typ av information är mycket värdefull för att komplettera bilden av hur antidepressiva läkemedel i vissa fall påverkar de enskilda individernas personliga liv och tillvaro. Vidare som ett värdefullt komplement till den etablerade biverkningsrapporteringen.

I det tredje delarbetet analyseras patienters biverkningsrapporter med hjälp av kvalitativ analysmetodik avseende patienternas syn på sina symtom på psykisk ohälsa och avseende sina upplevelser av patient-läkarrelationen. Den metod som användes för detta var innehållsanalys (content analysis). Resultatet av denna analys visade på en situation där en motsättning uppkom mellan patient och läkare i tolkningen av symtom på psykisk ohälsa, där patienterna ofta förknippade dessa med påfrestande yttre faktorer, medan de upplevde att detta avfärdas av läkaren genom en omtolkning till medicinska problem som krävde läkemedelsbehandling. Detta kunde även leda till en konflikt mellan patient och läkare som i vissa fall upplevdes mycket intensiv från patientens sida och skadade tilliten till hälso- och sjukvården på ett allvarligt sätt. Dessa observationer tolkades som att det föreligger en risk för en påtvingad medikalisering i dagens kliniska praxis vid handläggningen av symtom på psykisk ohälsa.

I det fjärde delarbetet analyseras den aktuella debatten avseende hur uppgången av symtom på psykisk ohälsa över tid ska tolkas. Enligt vissa forskare kan en sådan uppgång tolkas som en effekt av de mätmetoder som har använts och i termer av medikalisering, snarare än en ”äkta” ökning av

psykisk ohälsa. I artikeln görs en analys av den begreppsliga innebörden av psykisk ohälsa och innebörden i påståendet att detta fenomen tenderar att öka över tid och uppfattas som ett av de största hoten mot en god hälsa i befolkningen. Analysen resulterar i urskiljandet av två olika perspektiv på folkhälsoproblem, å den ena sidan ett ”reduktionistiskt” perspektiv och å den andra ett ”holistiskt”. Dessa är grundade i olika uppfattningar av vad hälsobegreppet innebär, vilket är viktigt att förstå för att kunna ta ställning i debatten om den psykiska ohälsan ökar eller inte i vårt samtida samhälle.

Slutsatsen från studierna är att utifrån patientrapporterna verkar det existera ett potentiellt problem i hur patienter diagnostiseras med depression och hur de förskrivs antidepressiva läkemedel under det medicinska mötet. Ökad medikalisering, som en följd av alltför vidlyftig diagnostisering, riskerar att individualisera psykiska problem och avleda fokus från folkhälsoarbetets sociala och politiska sammanhang. Därmed sker en medikalisering av symtom på psykisk ohälsa som leder till att bakomliggande samhällsproblem blir definierade som individuella hälsoproblem. Detta går i så fall stick i stäv med modern folkhälsopolitik som förespråkar intervention mot så kallade strukturella orsaker, det vill säga strukturer och processer i samhället, som den viktigaste strategin för att förbättra befolkningens hälsa. En utvidgad läkemedelsbehandling riskerar dessutom leda till ökade vårdkostnader och biverkningsskador. Överdiagnostik och överbehandling kan i sin tur leda till att tilltron till hälso-och sjukvårdssystemet minskar. Om depression ska förstås som ett växande folkhälsoproblem kräver det därför att det görs en distinktion mellan de ohälsoproblem som är medicinska problem och mellan de som inte är medicinska problem där argument för ökad medicinering samtidigt måste relateras till den eventuella faran att sociala problem och livskriser medikaliseras.

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Appendix