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Reduced mortality – increased morbidity? Morbidity in relation to the emerging system of sickness funds 1890-1960

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Abstract

In recent decades, worldwide life expectancy has increased by as much as ten years. However, also the time spent with ill health increased, and not only among the aging population. This so-called health paradox is also reflected in the fact that women are generally more ill but lives longer than men. Previous research suggests that the earlier decrease in mortality in Europe, during the 1800s and the early 1900s, also led to an increased morbidity. This project aims to increase our knowledge concerning changes in morbidity and changes in what was regarded as an illness in relation to the emerging welfare system in Europe. Sweden is in focus – the Swedish source material offers unique opportunities to study changes in morbidity. Both women's and men's health will be analyzed and the study has a clear gender perspective. With the industrial revolution the system of sickness funds expanded, which gave laborers with membership compensation for sick leave. Archive material from these sickness funds and official statistics constitutes appropriate source material. The question of how the insurance system affected the perception of illness will be studied with the help of journal articles, government investigation material etc. By adding to the knowledge that already exists about changes in mortality with knowledge on morbidity, this project intends to provide a new understanding of the differences and changes in public health.

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In December 2012, *The Lancet* published a comprehensive study in which risk factors for ill health were evaluated. It showed that the average life expectancy worldwide has increased by a full ten years since 1970. However, the time people are living with illness has also increased and not only among the aging population (GBD 2012). This so-called "health paradox" is also reflected in the fact that women are generally more ill than men but live longer (Smirthwaite 2007). This paradox has been explained in two ways. One emphasises that risk factors for ill health are made up more and more of non-communicable diseases such as cardiovascular disease, cancer and mental disorders; the other highlights that our perception of morbidity has changed.

This health pattern varies in different parts of the world and today's health conditions have historical roots. In Europe, the major mortality decline in infectious diseases took place during the 1800s and continued into the 1900s. Did this reduced mortality result in a similar increase in morbidity as that shown in current global trends? Were the patterns of women's health different from those of men then as well? Or

was there perhaps a change in how illness was perceived? This issue becomes extra interesting in the light of the fact that a system of private health insurance societies, so-called friendly societies or sickness funds, emerged during the same period.

This article will present a recently started project, financed by the Swedish research council. The aim is to study on the one hand changes in morbidity and on the other changes concerning what was regarded as an illness in relation to the emerging welfare state in Europe. Chronologically, the focus is on the turn of the century 1900 and the first half of the 20th century. Sweden is at the core of the study, as the Swedish source material offers unique opportunities to study shifts in ill-health and morbidity. From a public health perspective, this period is of great importance as it marks the breaking point between a time when mortality in the western world was dominated by infectious diseases and a time when mortality more and more became dominated by non-communicable diseases. This shift is usually called the epidemiological transition. Previous research has concluded that this change took place at the same time as mortality rates declined sharply; however, it is unclear as to what impact these changes had on actual morbidity. Since morbidity is a relative concept, this study will emphasise the tension between actual and perceived illness. Unlike previous research, this study will highlight both women and men's health. In addition to putting Sweden on the European health map, a gender perspective will shed new light on European development. At the same time, present-day health patterns will be given a historical perspective.

Previous studies on morbidity

Historical analysis of the improved health in Europe has mainly been based on mortality statistics. This is particularly evident in Swedish research, due to the fact that the Swedish source material is unique in terms of its magnitude and details concerning mortality and causes of death. The consequence is that relevant Swedish historical research to a large extent lacks an understanding of actual morbidity. However, it is clear that changes in the perception of disease and morbidity occurred around 1900, as well as that these changes varied according to gender (see for example Johannisson 1990, 1998). Nevertheless, it has not been studied how these changes related to the emerging scheme of sickness insurance. Internationally, research exists that has studied changes in actual morbidity. These studies are based primarily on data from the payments male workers received for sick leave from British friendly societies. Swedish researchers have studied the Swedish sickness insurance system, but mostly by examining changes in laws and regulations not by studying morbidity (see for example Lindqvist 1990; Berge 1995; Andersson 2000; Olofsson and Edebalk 2000; Johansson 2003).

Previous research has revealed an increase in morbidity by the turn of the century 1900, but opinions differ as to what this really meant. Historian James C. Riley argues that a consequence of the reduction in mortality rates was that more frail people survived, resulting in increased morbidity around 1900 (Riley 1987a, 1987b, 1989, 1997). Demographer Robert I. Woods and economist John E. Murray instead argue that increased sick leave was more an indication of a changed view on health and on when taking sick leave is legitimate - not an indication of an actual increase in morbidity. They point out, however, that morbidity needs to be studied in much more detail than in Riley's research. For example, one needs to take better account of age-specific mortality (Woods, 1997; Murray 2003).

Historians Bernard Harris and Martin Gorsky have studied age-related illness and found that morbidity does not seem to have increased, but instead remained at the same level (Gorsky & Harris, 2004; Gorsky et al. 2006, Harris et al. 2011). Nevertheless, the contemporary debate in late 19th-century England assumed that claims from friendly societies had increased. Contemporary commentators argued that the legitimate reasons for staying home from work were changing. They argued that the increase in friendly societies resulted in a growing distance between the societies and their members, which is why control of cheaters had become a central issue (Harris et al. 2011).

Furthermore, the Swedish historian Anna-Karin Frihs has shown that the debate on morbidity did not always reflect reality. In about 1900, the perception of young women changed from the stereotypical image of a frail, sickly young woman to the notion of a happy and healthy young woman – without a corresponding change in actual morbidity (Frihs 2007). Therefore, Frihs' research somewhat contradicts Harris and Gorsky's results regarding an increased morbidity observed by contemporaries. This discrepancy is interesting as increased medicalization and the expansion of the sickness insurance system in this period have traditionally been considered to have had an expanding influence on the number of disease diagnoses.

The philosopher Ian Hacking provides a possible explanation for the discrepancy between actual morbidity and a changed view of morbidity. Strongly influenced by Foucault, Hacking believes that how we categorize, mention and debate different phenomena also helps to redefine them. New systems, therefore, have a direct impact on human thought and behaviour (Hacking 1986, 1995). Thus, the development of a sickness insurance system can be seen as linked to the fluctuating perception of morbidity.

Three arguments summarise the state of research and serve as a foundation for this study: 1) An increased registration of morbidity corresponded to an actual increase in sickness. 2) The registration of morbidity increased, but was caused by a changed view of morbidity. 3) The registration of morbidity did not increase. Contemporary debate about increased morbidity was rather put forward by the expansion of the sickness insurance system.

Three different ways to study morbidity through sickness funds

With the onset of the industrial revolution, the system of sickness funds expanded. It offered an opportunity for the working population to receive compensation for sick leave through membership. The Swedish system of sickness funds soon became partially government funded, even though the Swedish sickness benefit system in the early 1900s was organized in private sickness funds. The number of sickness funds in Sweden increased after 1870 and in 1891 a new law was passed that meant that the government partially provided subsidising to registered funds under the new legislation. More reforms followed until compulsory health insurance was introduced in 1955. Moreover, the Swedish welfare system developed gradually during the first half of the 1900s, reforms that had a great impact on society.

In order to follow morbidity in relation to the development of the sickness insurance scheme and the general welfare system, the study's period of investigation has been set to approximately 1890-1960. The study is comprised of three parts: a statistical analysis of the changes in sickness benefit claims on a national level, a qualitative assessment of the perception of morbidity in relation to the emergence of sickness insurance and a case study of morbidity using two sickness funds. The latter part contains sensitive personal data from individuals who may still be alive. The study has therefore undergone an ethical review to ensure good handling of the data.

In summary, all three parts of this study are required in order to gain knowledge about morbidity and to provide new perspectives on the epidemiological transition. In the following description of the three sub-studies, references are made to the results of my pilot studies; however, considering the complexity of the source material, they are largely preliminary.

National statistics on sickness funds

In order to provide an overview of the changes in morbidity, published statistics on sickness funds will be used. Due to the fact that the Swedish system was partially state-funded since 1892, sickness funds were required to submit certain statistics annually. Thus, certain types of data are available from all registered funds. This fact demonstrates one of the main advantages in using the Swedish source material. These statistics provide an overall picture of the use of the insurance in relation to changes in membership, the gender of membership, age distribution among mem-

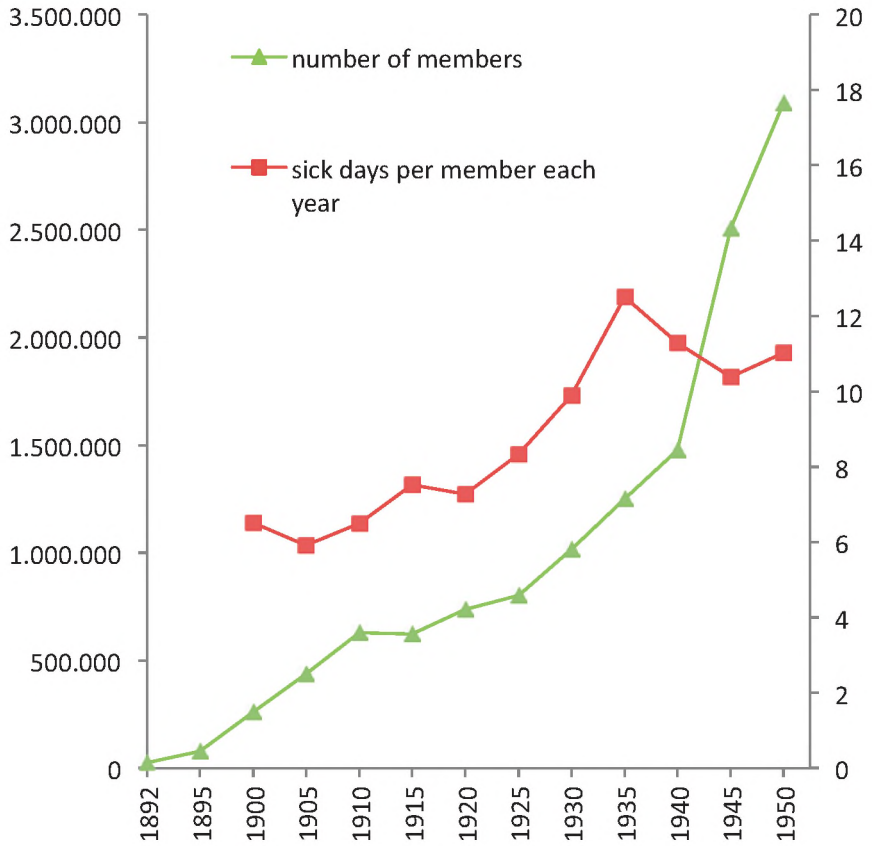

Figure 1 The number of members and the number of sick days per member every fifth year in Swedish sickness funds, 1900-1950

Source: Published national statistics: Kommerskollegium. Afdelningen för arbetsstatistik, *Arbetsstatistik. B, Registrerade sjukkassors verksamhet*, Stockholm (1905-1912); K. Socialstyrelsen, *Sveriges officiella statistik: Registrerade sjukkassor*, Stockholm (1915-1936); Riksförsäkringsanstalten, *Sveriges officiella statistik: Erkända sjukkassor*, Stockholm (1940-1957).

bers, the number of sick days and the cost of sickness, particularly at the national but also at the county level. The processing of these data is intended to provide a solid foundation of knowledge about changes in claims from sickness funds.

In Figure 1, statistics from every fifth year for the period 1900 to 1950 are shown. It shows a general increase in the number of sick days claimed per member during the period 1905-1950, with a »hump« around 1935 with an extra high number of sick days. By examining national statistics, therefore, an increase in sickness withdrawals can be identified. The chart raises several questions. Does this increase persist if the statistics are made age-specific? What were the differences between women's and men's sickness claims? What changes in the welfare system may have influenced changes in morbidity? A deeper statistical analysis within a larger context is therefore needed in order to make an adequate interpretation. It is clear, however, that along with the rise in the number of members, the general increase in sick days per member successively raised the costs for this partly government-funded system. These increased costs brought about a debate concerning both the benefits of this insurance and the concept of disease.

Changes in the perception of sickness

Normative perceptions of illness will be studied by means of examining the debate brought about by the expansion of the sickness funds. Some of the issues discussed were: "is old age a disease", "are all types of illness eligible for compensation" and also how sickness funds should deal with the incapacity to work caused by a member's alcohol consumption (Svensk Sjukkassetidning, June 1910). Before the new legislation that was passed in 1931, several doctors expressed their concern at the proposed changes. With the expansion of the insurance system, cheaters were assumed to have increased, while physicians expressed a fear of being forced to act as policemen for sickness funds. Moreover, the problem of providing accurate diagnoses was raised, which included the question of how to assess a patient's ability to work (Socialmedicinsk tidskrift, 1930 and 1931; Svenska läkartidningen, 1931). These examples make it clear that there was a lively debate concerning the cost of the health insurance system, disease assessments and problems related to how the system had expanded.

With regards to source material, journals such as *Svensk Sjukkassetidning*, *Socialmedicinsk tidskrift*, and *Svenska läkartidningen* will be used, as well as *Riksdagstryck*, *Committee Reports* for the legislative changes regarding sickness insurance conducted in 1892, 1910, 1931, 1955 and *Government Official Reports*. The debate on the assessment of illness will provide a deeper understanding of the context in which compensation was granted and diagnoses stated. The following section describes the part of the study in which member's sickness claims and disease diagnoses will be studied in more detail.

Individial sickness experiences

The analysis of how sickness claims and diagnoses changed during the investigation period in relation to factors such as gender, age and occupation will be based on studies of two sickness funds from Gothenburg. They are *Sömmerskornas Sjuk- och begravningskassa* and *Sjuk- och begravningskassan Redbar*. These two sickness funds provide good opportunities to study the disease experience for both men and women from the 1890s until 1955. The former was founded in 1898 and had only female members working in the needlework or textile industry. The second was established in 1891 and most of the members were men from various occupations such as carpenters, bricklayers, factory workers, blacksmiths and tailors. Both of these sickness funds had about 200 members around 1900 and many remained loyal members for 30 years or more. Therefore, their membership numbers can be considered normal for that time. In addition, they both had a stable flow of members which forms a good basis for the study. In both cases, registers over paid sick days are well-structured allowing the monitoring of illness experiences for each member. It contains information pertaining to name, address, occupation, date of birth and so forth. In addition, information about the illness benefits applied for by every member is provided. It states the date of application, number of sick days, the amount of compensation the member received and the illness or accident for which the member received compensation. Therefore, individual case histories can be created for each member. These records give us a unique opportunity to monitor illness experiences for thousands of men and women during their working lives.

The following two examples clarify the historical value of what these archives contain. The list of members and medical records for *Sjuk- och begravningskassan Redbar* contains, for example, a male member whose sickness benefits can be followed from 1889 to 1932. Over the years, he was paid compensation on eleven different occasions, both for occupational accidents and diseases such as diarrhoea, flu, pain in the knee and stomach problems. From *Sömmerskornas Sjuk- och begravningskassa*, an unmarried woman, whose benefits can be followed for the period 1898 to 1933, will serve as an example. She received compensation on ten separate occasions, several of these for longer periods of illness caused by eye problems combined with what was termed "neurological disease". The two examples provide a stereotypical image of the nerve-sick woman and the man with concrete diagnoses such as joint pain and stomach problems. It is possible that the ex-

amples describe differences in morbidity between men and women; however, it could also be an example of the difference in how men and women's morbidity was described, interpreted and named (for a discussion of the non-obvious and changing boundaries between physical and mental disorders, see for example Figlio, 1982). Although these questions are difficult to answer, this study enables the highlighting and discussion of gender differences.

In the context of this project, the illness experiences of members will be analysed based on age, occupation, gender, where they lived and with regard to changes over time. In this way, the study will seek to explain both the changes in the experience of disease, as well as the differences among diverse groups' encounters with illness.

Conclusion

The Swedish sickness funds annually reported certain data which gives unique national statistics on sickness claims from 1892. Unlike previous British studies which have measured morbidity solely by the claims made by male members, the Swedish material offers the opportunity to study both men and women. The fact that current statistics show that women's and men's morbidity differs in terms of extent and diagnoses highlights the need to complement and problematize previous research. A gender perspective is, therefore, essential. The age aspect is also important: Were the elderly sicker than the young? Therefore, by using a variety of sources and by looking at both male and female sickness experiences, this study will add to our knowledge on sickness during the mortality transition. By adding new knowledge on morbidity to existing facts about changes in mortality, the project will provide a better understanding of the differences and changes in public health. Furthermore, the project will introduce a broader time perspective to the current debate on morbidity and health issues. An historical illumination on how arrangements such as insurance systems affect our perception of sickness can provide a valuable perspective on similar issues in present day society.

Sources

Printed material

KOMMERSKOLLEGIUM. AFDELNINGEN FÖR ARBETSSTATISTIK, *Arbetsstatistik. B, Registrerade sjukkassors verksamhet*, Stockholm (1905-1912)

K. SOCIALSTYRELSEN, *Sveriges officiella statistik: Registrerade sjukkassor*, Stockholm (1915-1936)

RIKSFÖRSÄKRINGSANSTALTEN, *Sveriges officiella statistik: Erkända sjukkassor*, Stockholm (1940-1957)

SVENSK SJUKKASSETIDNING, June 1910

SOCIALMEDICINSK TIDSKRIFT, 1930 and 1931

SVENSKA LÄKARTIDNINGEN, 1931

The regional state archive in Gothenburg (Landsarkivet i Göteborg, Polstjärnegatan)

SÖMMERSKORNAS SJUK- OCH BEGRAVNINGSKASSA – GLA/ B0184:077

SJUK- OCH BEGRAVNINGSKASSAN REDBARS ARKIV – GLA/ B0184:056

References

Andersson, Jenny, *Staten och sjukkassorna: regleringarna av den svenska sjukkasserörelsen 1891 och 1910* (Uppsala: Uppsala universitet, Ekonomisk-historiska institutionen, 2000).

Berge, Anders, *Medborgarrätt och egenansvar: de sociala försäkringarna i Sverige 1901-1935* (Lund: Arkiv, 1995).

Figlio, Karl, 'How does Illness Mediate Social Relations? Workmen's Compensation and Medico-Legal Practices, 1890-1940', in *The Problem of Medical Knowledge: Examining the Social Construction of Medicine*, ed. by Peter Wright and Andrew Treacher (Edinburgh: Edinburgh University Press, 1982) pp. 174-224.

Frih, Anna-Karin, *Flickan i medicinen: ungdom, kön och sjuklighet 1870-1930* (Örebro: Örebro universitetsbibliotek, 2007).

'GBD' (Global Burden of Disease Study 2010), http://www.thelancet.com/themed/global-burden-of-disease, *The Lancet* (dec 2012) hämtad: 2013-01-10.

Gorsky, Martin and Harris, Bernard, 'The Measurement of Morbidity in Interwar Britian: Evidence from the Hampshire Friendly Society', in *Facing Illness in Troubled Times: Health in Europe in the Interwar Years*, ed. by I Borowy and W. Gruner (Lang, 2004), pp. 129-63.

Gorsky, Martin, Harris, Bernard and Hinde, Andrew,

'Age, Sickness and Longevity in the Late Nineteenth and Early Twentieth Centuries: Evidence from the Hampshire Friendly Society', *Social Science History*, 30 (2006) pp. 571-600.

Hacking, Ian 'Making up People', *Reconstructing Individualism: Autonomy, Individuality, and the Self in Western Thought*, ed. by Thomas C. Heller and others (1986), pp. 222-236.

Hacking, Ian 'The looping effects of human kinds', *Causal cognition: a multidisciplinary debate, ed. Dan Sperber and others* (1995), pp. 351-383.

Harris, Bernard and others, 'Ageing, Sickness and Health in England and Wales During the Mortality Transition', *Social History of Medicine*, 24 (2011) pp. 643-665.

Johansson, Peter, *Fast i det förflutna: institutioner och intressen i svensk sjukförsäkringspolitik 1891-1931* (Lund: Arkiv, 2003).

Johannisson, Karin, *Medicinens öga: sjukdom, medicin och samhälle – historiska erfarenheter* (Stockholm: Norstedt, 1990).

Johannisson, Karin, *Kroppens tunna skal: sex essäer om kropp, historia och kultur* (Stockholm: PAN/Norstedt, 1998).

Lindeberg, Gösta, *Den svenska sjukkasserörelsens historia* (Lund: C. Blom, 1949).

Lindqvist, Rafael, *Från folkrörelse till välfärdsbyråkrati: det svenska sjukförsäkringssystemets utveckling 1900-1990* (Lund: Arkiv, 1990).

Murray, John E., 'Social Insurance Claims as Morbidity Estimates: Sickness or Absence?' in *Social History of Medicine*, 16 (2003) pp. 225-245.

Olofsson, Jonas, and Edebalk, Per Gunnar, 'Enskilt och offentligt i socialpolitiken: arbetsplatsanknuten sjukersättning i Sverige 1830-1955', in *Historisk tidskrift*, 120 (2000) pp. 55-89.

Riley, James C., 'Ill Health During the English Mortality Decline: The Friendly Societies' Experience' in *Bulletin of the History of Medicine*, 61 (1987a) pp. 563-588.

Riley, James C., 'Disease without Death: New Sources for a History of Sickness' in *Journal of Interdisciplinary History*, 17 (1987b) pp. 537-563.

Riley, James C., *Sickness, Recovery, and Death: A History and Forecast of Ill Health* (University of Iowa Press, 1989).

Riley, James C., *Sick Not Dead: The Health of British Workingmen During the Mortality Decline* (Johns Hopkins University Press, 1997).

Smirthwaite, Goldina, *(O)jämställdhet i hälsa och vård: en genusmedicinsk kunskapsöversikt* (Stockholm: Sveriges kommuner och landsting, 2007).

Woods, R., ''Sickness Is a Baffling Matter'. A Reply to James C. Riley' in *Social History of Medicine*, 10 (1997) pp. 157-163.