Editorial

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Increase in "Remnant Diseases" after 1978 Overtreatment of Cardiovascular Diseases, or?

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Introduction

Mortality rates from total (TOT), cardiovascular (CVD) and coronary heart diseases (CHD) have declined in Finland since the commencement of the North Karelia Project in 1972 [1-4]. Figure 1 shows a significant drop in TOT, CVD, and CHD mortality rates after 1971, based on age-standardized death rates (per 100,000) for ages 15-64 from [1]. (CVD excluding alcohol-related diseases). In 1990, it was reported that CHD/TOT began to increase in the late 1950s and reached its peak in 1977, five years after the start of the North Karelia Project [2,3]. Figure 2 shows the development of CHD/TOT as well as CVD/TOT based on [1]. Rarely published data on CVD development are available in [4].

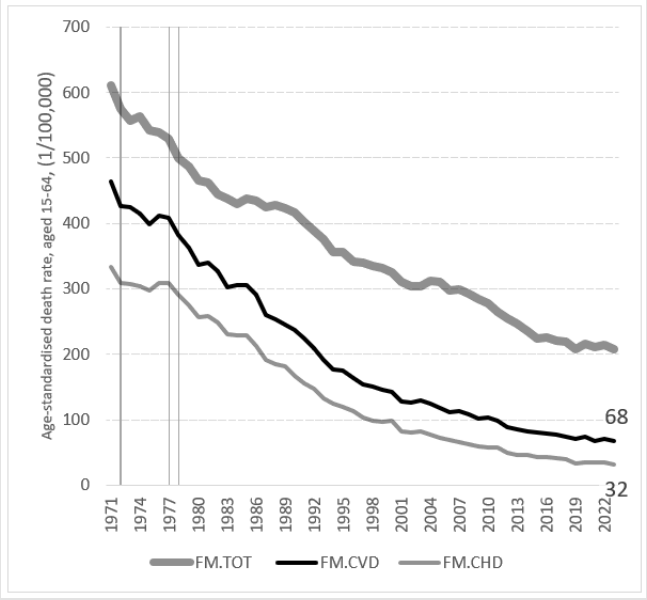

Figure 1: Development of Total, CVD and CHD mortality in Finnish population.

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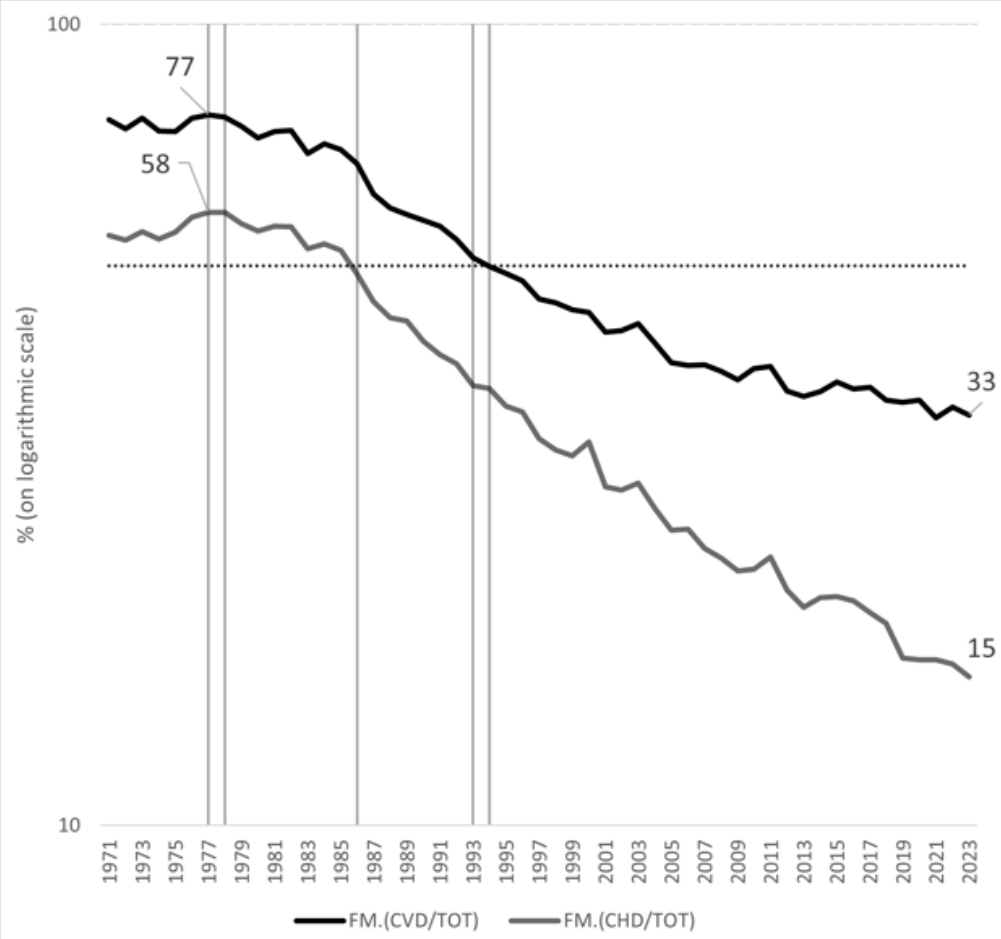

Figure 2: Proportions of Total mortality: CVD and CHD.

From 1977 to 2023, CVD/TOT decreased from 77% to 33% and CHD/TOT from 58% to 15%. Meanwhile, the proportion of "Remnant Diseases: Non-CVD" increased from 23% (100-77) to 67% (100-33), and NonCHD from 42% (58-15) to 85% (100-15). Figure 2 indicates that CHD/TOT fell below 50% in 1986 and CVD/TOT in 1994. Following 1977, there was an observed increase in absolute mortality from Non-CVD and Non-CHD, as depicted in Figure 3.

Figure 4 depicts the trends in Non-CHD and Non-CVD after 1971. Both initially declined; NonCVD dropped to 117 (1/100,000) in 1978, peaked at 194 in 2005, then fell below 150 but stayed above the 1978 level. Non-CHD hit its lowest point at 196 (1/100,000) in 1982 between 1971 and 2012. The value subsequently rose to a peak of 249 in 1990. After maintaining stability for approximately 15 years, it began to decrease in 2005 and fell below the 1982 level by 2013 [Figure 3, Figure 4]. Figure 5 illustrates the relative changes in Non-CVD, Non-CHD, CHD, and CVD compared to their respective values in 1972. Figure 5 provides comparable data to Figures 3 and 4, offering enhanced temporal representation while potentially presenting a misleading quantitative impression.

Figure 6 shows the proportional development of CVD subtypes: CHD, oHD (other heart diseases, excluding rheumatic and alcohol-related), CbrVD (cerebrovascular diseases), and oVD (other vascular diseases) [1].

Figure 6 illustrates the progression of various CVD subtypes. Between 1971 and 1980, there was an increase in CHD, which correlates with a more rapid decline in CVD compared to CHD (refer to Figure 1). After 1980, the proportion of CHD decreased, while oHD and oVD increased. CbrVD remained stable.

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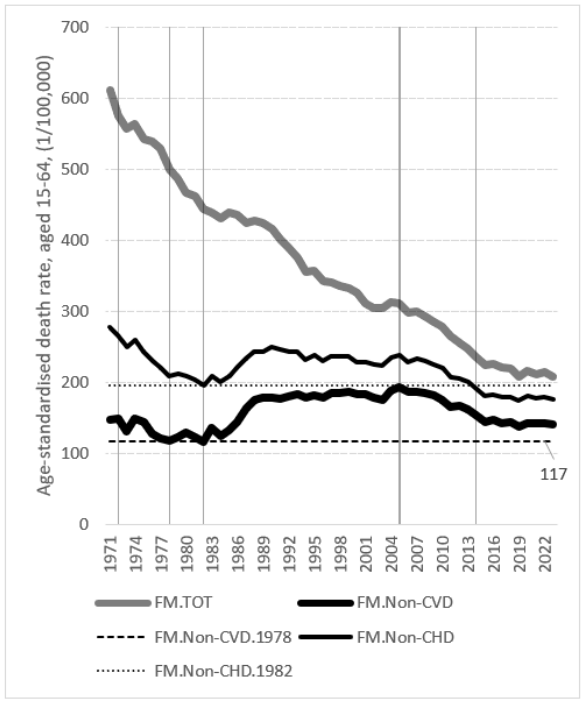

Figure 3: Total, Non-CVD and Non-CHD mortality in Finland 1971-2023.

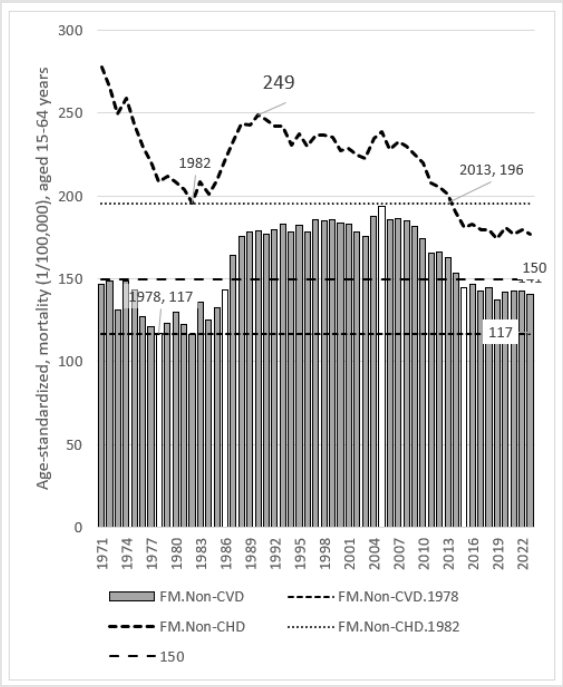

Figure 4: Non-CVD and Non-CHD mortality in Finland 1971-2023.

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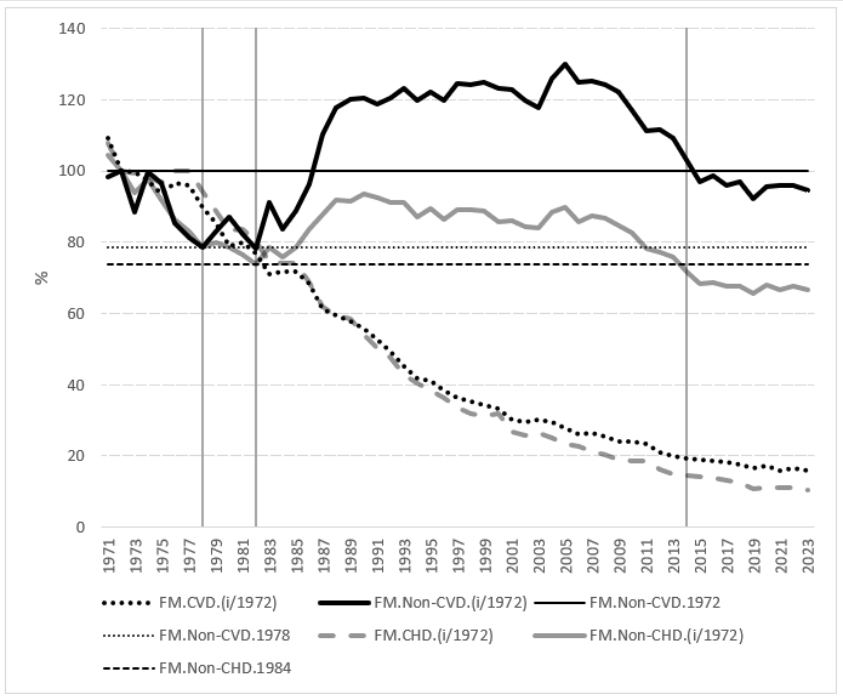

Figure 5: Relative changes of CVD, CHD, NON-CVD and Non-CHD to their values in 1972.

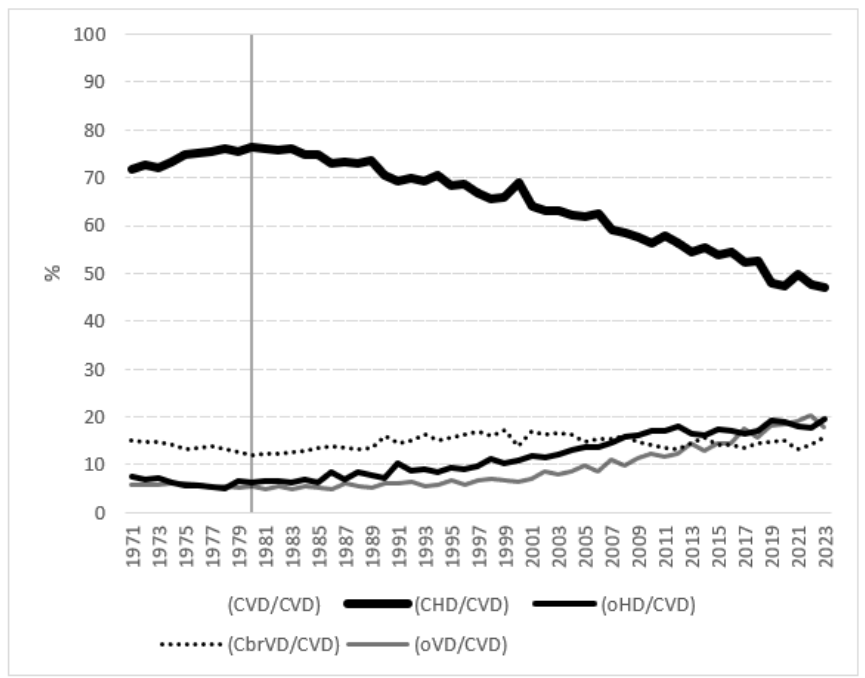

Figure 6: Proportions of CHD, oHD, CbrVD and oVD subtypes of CVD.

Since 1978, while mortality rates from cardiovascular diseases (CVD) have decreased [1,2], there has been an increase in absolute mortality rates since 1978 from other diseases (non-CVD). Between 1987 and 2014, this mortality exceeded the 1972 level [3, 4]. While statistical associations do not establish definite causes, they can suggest explanations. One possible explanation is in dietary changes, which "became fully effective (against CHD) from the late 1970s" (Pyörälä, 1989, in [3]). Other concerns may pertain to the medication's direct or indirect effects on physiological functions. Changes in the composition of foodstuffs have also been noted [5,6]. Maybe the question is not only in what we eat, but when: Professor Rautavaara said: "We must eat spoiling food, but before it is spoiled". Maybe he spoke about PUFA's.

Statistical evaluation of CHD and CVD mortality is in [1] more accurate than earlier [3,4], but it seems to be clear that CHD mortality is not a golden standard of Cardiovascular health.

Acknowledgment of Copilot in language issues, excluding faults.

References

1. Statistics Finland's free-of-charge statistical databases. Causes of death: web: "11ay Deaths, age-standardised and crude deaths rates by under lying cause of death (time series classification) and sex, whole population and persons aged 15-64, 1971-2023" > select: 27-30. Diseases of the circulatory system excl. alcohol-related (I00-I425, I427-I99), [including 27 Ischaemic heart diseases (I20-25) and 29 Cerebrovascular diseases (I60-I69)]. (dated: 20241128 08:00, November 2024, internal reference code: "001_11ay_2023").
2. (2009) THE NORTH KARELIA PROJECT: FROM NORTH KARELIA TO NA TIONAL ACTION. National Institute for Health and Welfare (THL), in collaboration with the North Karelia Project Foundation. ISBN 978-952-245 000-5 (nid.). ISBN 978-952-245-001-2 (PDF). Helsinki University Printing House. In: Puska P, Vartiainen E, Laatikainen T, Jousilahti P, Paavola M (Eds.)., Helsinki, CHD Mortality in Finland and the Province of North Karelia - Changes around 1972 - The Start of the North Karelia Project, pp. 153.
3. Valkonen T, Martikainen P (1990) Development of mortality from ischaemic heart disease in subgroups of the population in Finland. Sosiaalilääketieteellinen Aikakauslehti. Journal of Social Medicine 27: 273-288.
4. Valkonen T, Niemi ML (1982) Age standardized mortality. The development of cardiovascular mortality in Finland from 1951 to 1978.
5. Koivistoinen P, Varo P, Laehelmae O, Nuurtamo M, Saari E, et al. (1980) Mineral Element Composition of Finnish Foods: N, K, Ca, Mg, P, S, Fe, Cu, Mn, Zn, Mo, Co, Ni, Cr, F, Se, Si, Rb, Al, B, Br, Hg, As, Cd, Pb and Ash. Acta Agriculturae Scandinavica Supplementum 22.
6. Mayer AM (2022) Historical changes in the mineral content of fruits and vegetables. British Food Journal, pp. 207-211.
7. Statistics Finland. 11br Deaths, age-standardised and crude deaths rates by underlying cause of death (time series classification) and gender, whole population and persons aged 15-64, 1971-2020.

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