

EMF and health -

some data you might not know about

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Introduction

On May 3rd 2013 the Swedish Radiation Safety Authority (SSM) presented its 8:th report on electromagnetic fields and population health, [1]. The report gives some assuring statements about lack of scientific evidence showing a causative relationship between electromagnetic fields (EMF) and public health.

In this summary we will cite some of those statements and present statistics strongly questioning the validity of conclusions drawn in the report. The aim of this web page is to make politicians and responsible authorities aware of some quite worrying trends in health statistics, that do not support the statements given by SSM.

We also suggest, that the reason, why such uncomfortable data are completely disregarded from and not mentioned in the report, should be further investigated. Such data have been published in scientific peer-reviewed journals, see ref [2-8]. Strong industrial economic interests are at stake, but never-the-less, the responsible authority should stay completely free and independent from such influence. Their only interest should be to care for the health of the population.

Statements from the report

1. These new data do not indicate health risks for the general public related to exposure to radiofrequency electromagnetic fields from base stations for mobile telephony, radio and TV transmitters, or wireless local data networks at home or in schools.
2. The number of published studies regarding leukaemia and malignant melanomas is very limited, but the published studies so far do not suggest that mobile phone use increases the risk of these diseases.

Some facts pointing in another direction

1. The effects from public radio and TV broadcasting transmitters and WiFi in schools

When the new FM broadcasting network was rolled out from 1955 in the Nordic countries, nothing less than a cancer boom started. Figure 1 shows how the number of deaths in both skin melanoma and lung cancer suddenly started to increase right after 1955 in Sweden. For every melanoma death there were 10 lung cancer deaths in Sweden. Corresponding numbers for Norway and Denmark were 8 respective 13 due to higher melanoma risk in Norway and to higher smoking prevalence in Denmark.

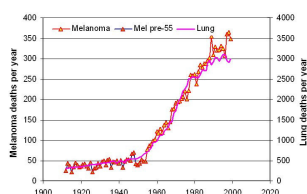


Figure 1. The number of deaths in melanoma and lung cancer boomed right after 1955, [2].

And, more curiously, the number of new melanoma cases did not start to increase until a few years after 1955. This means that the increasing number of deaths could not have been due to increasing numbers of new melanoma cases. Rather it indicates that something suddenly reduced the possibility of cancer victims to stay alive, and that it also later increased the risk for new cases to appear. Figure 2 shows that the mortality started to increase simultaneously with the roll-out of the FM broadcasting while the rate of new cases started to increase somewhat later on. And, finally, the new habit of taking charter trips to sun resorts did not start until several years later.

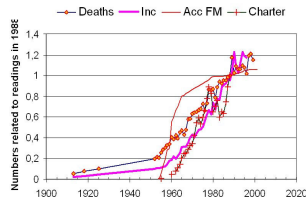


Figure 2. Increasing rates of melanoma mortality, incidence and charter trips

relative to 1988, [3].

According to Figure 2 it took up to 10 years until all Sweden became covered by the new FM broadcasting system. Counties that had to wait for up to ten years appeared to stay at a low and stable melanoma mortality until the very moment when their FM broadcasting was turned on. Figure 3 shows the mortality relative to the starting time for FM broadcasting in each county area.

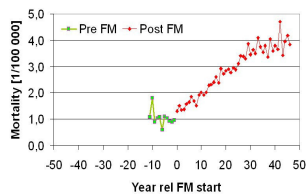


Figure 3. Melanoma mortality did not start increasing until the FM system was

switched on, [3].

Finally, it appeared that municipalities surrounded by several main broadcasting towers had higher melanoma incidence than areas covered by only one transmitter, see Figure 4.

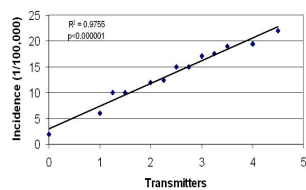


Figure 4. Areas covered by several transmitters have higher melanoma incidence,

[4].

Summary. Epidemiologic data show a significant and strong correlation between body-resonant radiation from FM broadcasting towers and incidence and mortality of melanoma. Other cancers like breast cancer and lung cancer show similar associations.

2. The use of mobile phones and head melanoma and other diseases

A very clear association between increasing use of mobile phones and increasing rates of head melanoma is seen in Nordic countries. Figure 5a shows the increasing rates and use of mobile phones in Sweden.

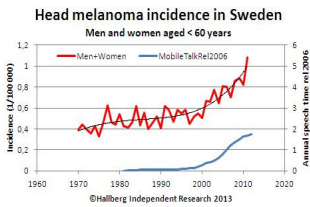


Figure 5a. The incidence of head melanoma for people younger than 60 years and mobile phone use, [5].

In statement no. 2, SSM refer not only to head melanoma but to melanoma in general. In Figure 5b we have looked closer at melanoma incidence from Denmark for younger men. Their data are made public already from 1943, so it is possible to compare the incidence development from 1955 onwards with the average level between 1943 to 1954. It is obvious that the incidence starts to increase significantly from around 2005.

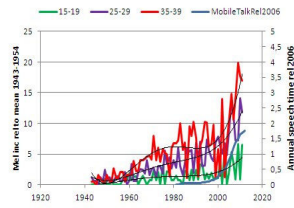


Figure 5b. Melanoma incidence among Danish young men relative to the average level 1943-1954.

It is well known that mobile phone use will affect heart pulse rate and capacity of fetus and new born babies. Figure 6 shows e.g. preliminary results regarding effects on blood after only 5 minutes of mobile phone use.

Conclusions: Exposure of pregnant women to mobile phone significantly increase fetal and neonatal HR, and significantly decreased the COP. [6]. [More pictures](#)

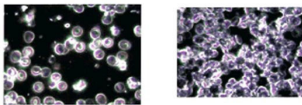


Illustration 2. Disrupted red blood cell intercellular communication occurs within minutes of exposure to Information Carrying Radio Waves. Red blood cells must be able to sense the location of other blood cells to avoid clumping. Slide at left: prior to cell phone exposure – red cells are functional. Slide at right: after five minutes on a cell phone – red cells are clumped and non-functional.

Figure 6. The effect on blood cells after only 5 minutes of exposure from a mobile phone, [6].

A very natural hypothesis is then that the risk for heart failures among new born babies will increase by mobile phone speech time and use. Figure 7 shows that the fraction of babies born with heart problems was stable 0.9 % since 1960 but that this fraction now has increased to a doubled level.

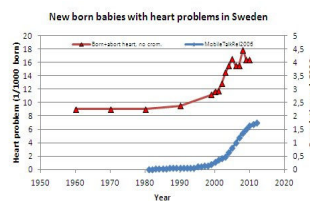


Figure 7. The fraction of babies born with heart failures has increased in parallel with mobile phone use, [7].

It has recently been noticed that thyroid cancer is increasing during last years. Figure 8 shows that in all Nordic countries there is a worrying trend, especially among women, of increasing incidence the past five years.

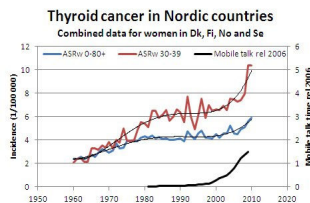


Figure 8. Thyroid cancer among women in Nordic countries show increasing rates, [8].

To spend 8 hrs a day in the wireless lan radiation in schools, might not be such a good idea as SSM say. It is obvious that this level of radiation also can affect the growing of creps, as recently was shown by five school girls in [Denmark](#). Figure 9 shows the growing after 12 days in a non-radiation environment and Figure 10 shows the same in a WiFi covered classroom. I am still waiting a comment on this from SSM.



Figure 9. After 12 days in a non-radiation environment the creps have been growing as normal.

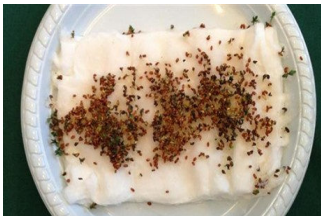


Figure 10. But in a WiFi environment it is not so easy to grow up...

Several other worrying trends can be seen on [this page](#). Any similarity with the increasing use of mobile phones is of-course just a coincidence.

Summary: We can clearly see worrying trends that should be taken seriously by responsible authorities. The examples given above should not be disregarded as matters of coincidence or chance. The fact that our responsible authority wants 100 % proof of a national disaster before anything is being done, is worrying. See ref. [9].

Final conclusions

The 8:th report about EMF and health issued by the Swedish Radiation Safety Authority (SSM) gives the kind of picture the mobile phone industry wants. It is important that we have a completely independent authority to deal with public health issues related to strong economic interests of the communication industry. The illusion that broadcasting radiation has never caused any health problems is also supported by the WHO organization in their Fact sheet #304, 2006. In that sheet they admit that the FM broadcasting band around **100 MHz is up to five times more effectively absorbed by the human body than other bands**, like those used for mobile phones. This is being used as an argument for the extremely safe mobile phones. An excerpt from the report:

"In fact, due to their lower frequency, at similar RF exposure levels, the body absorbs up to five times more of the signal from FM radio and television than from base stations. This is because the frequencies used in FM radio (around 100 MHz) and in TV broadcasting (around 300 to 400 MHz) are

lower than those employed in mobile telephony (900 MHz and 1800 MHz) and because a person's height makes the body an efficient receiving antenna. Further, radio and television broadcast stations have been in operation for the past 50 or more years without any adverse health consequence being established." [10].

Enormous economic interests are at stake when the health aspects of mobile phone use are being evaluated. Thus, members of expert committees putting together reports like the one SSM issued, should not be linked to industrial interests. It is quite remarkable that another authority, the Swedish National Health and Welfare Authority, (SOS) has not reacted on the obviously alarming trends shown here in Figures 5-8. If a public activity, like mobile phone use, suddenly seems to cause increasing incidence rates of several diseases, we should expect that the responsible authority would react and initiate deeper studies to pinpoint causative factors.

It is now up to our Government and the political parties to digest this material, that probably is new to many involved, and to draw relevant conclusions. Our ministers are probably quite easily manipulated by lobbyists and their industrial contacts, but at least some of our political parties might start doing something to protect the health of the Swedish population.

Otherwise, we will just have to wait and see and check if our graphs continues as feared or if everything was just a matter of coincidence...

References

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