1997 – A curious year in Sweden

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A look into the statistics on health care and other social security costs clearly shows that the problem [HEALTH CARE COSTS] started abruptly in the autumn of 1997. A further analysis reveals that several different characteristics of the health of the population also showed a sudden trend-break in that year.

An abrupt change from an improving trend to an increasing number of sick-registered was noticed in the autumn of 1997.

We found that for all individual counties in Sweden there was a similar precise time when their individual graphs broke the downward trend and started to go upwards. … we could specify the month in which any one of the 21 counties started to `go wrong'. This happened within the time frame of October 1997 to January 1998. … >From a record low level of around 40 000 in 1997 the number increased in just 6 years by 100 000, giving a total close to 140 000 long-term sick.

It turns out that this type of problem [LOAD INJURY] also started to increase in 1997. In the year 2001 the number of registered people who were ill due to load injuries had increased by 100%.

Depression and other psychological diseases also increased since 1997. The number of suicide attempts among young people has increased by 30% between 1998 and 2001.

In Stockholm the new prostate cancer cases suddenly start to increase from 1997 while the number of performed PSA tests has been steadily increasing in the whole country since 1990.

The number of people severely injured in traffic accidents in Stockholm County has been increasing strongly since 1997. In Stockholm, where the number of seriously injured people has increased from 400 in 1996 to an estimated 1200 in 2004. We looked at the number of people in Stockholm injured in traffic accidents involving bus drivers. It turned out that the same trend is seen here: the number of injured people has increased from less than 150 in 1997 to 250 in 2003.

According to statistics from Statistics Sweden (SCB) small companies are in general healthier than large companies. This picture has been unchanged since 1998. The data show that companies with more than 50 employees are twice as sick as small companies.

[THE ENCLOSED GRAPH IS INTERESTING, SHOWING HAPPENINGS IN 1997]

From that we were able to state that health-related measures in Sweden by 2002 in average have degraded by a factor of 2.2 since 1997.

So, what happened in 1997?

In August 1997 the first digital TV transmitter was launched. This autumn the first `hot-spots' for mobile connection to the Internet were also introduced to serve travelling executives in hotels, train stations, airports, some petrol stations, etc. But the real big thing that came into practical use by the whole population was the introduction of the dual-band mobile system. The reason was that the number of available connections in cities was too small for the rapidly increasing demand. GSM 1800 offered many more connections in crowded cities and solved the problem. In Sweden, Telia AB got permission to start 1800MHz transmission by the Post and Telecom Agency (http://www.pts.se) in 1996.

The first lab tests were done late 1996 and the first public trials started in the spring 1997. In the summer of 1997 relaxed regulations were issued regarding the erection of small transmitter antennas needed for GSM 1800 and a major building programme was launched from the autumn of 1997.

In 1997 many large companies introduced wireless office phone systems. One such is called GSM-in-Office and operates at 900 MHz. This made it necessary to install a number of small transmitters in office buildings, corridors and even in the office work area. The employees had to use the mobile phone for all calls, in many cases for long calls. So, from 1997 many employees became exposed to microwave radiation during all work hours from small base stations, in addition to stronger radiation from their handsets during all their calls. Smaller companies did not introduce this type of office system. Smaller companies also have better health records in general as reported by the SCB (http://www.scb.se/) and mentioned before.

All this data led to the suspicion that the degraded health in Sweden might be related to the sudden exposure to microwave radiation at 1800MHz. Detailed information about the number of subscribers and average speech time per subscriber and year was obtained from the Post and Telecom Agency. … The number of spoken minutes using GSM 900/1800MHz phone has now accumulated to 50 x10e9 min in Sweden or about 100 000 years of mobile phone conversation.

We have noticed that the increase in the number of long term sick people also fits very well with the annual length of GSM speech time. The number of traffic-injured people in Stockholm follows a similar pattern. …

Radiation from handsets or from towers?

Even if a specific disease happens to show a trend-break the same year as the GSM 1800 system was rolled out, there does not need to be a connection. But if the disease also has a statistically significant correlation with the output power from the phones, one should start searching for possible links.

Short- and long-term sicknesses show a clear trend change during the autumn of 1997 and a very strong correlation ($R2=0.82$; $P<0.000001$) to the average output power from mobile phones in the different counties.

Deaths due to external causes (accidents, murder, suicide, etc.) started to increase after 1997 and show a strong correlation ($R2=0.51$; $P=0.00026$) to the average output power from mobile phones in the different counties.

Workplace-related injuries and sickness started to increase in 1997 and they show a strong correlation ($R2=0.63$ and 0.37, respectively) to the average output power from mobile phones in the different counties.

Prostate cancer among men 50–59 years of age started to increase from the autumn in 1997. However, there is no positive correlation between prostate cancer and the output power from mobile phones (r=–0.46). Instead, this disease has increased mostly in the large city counties of Sweden. Here we have found a possible link to the rollout of the digital TV network in Sweden (Hallberg and Johansson, 2004).

The recovery time after breast or heart surgery operation has increased since 1997. In both cases there is also a noticeable correlation (R2=0.26; P=0.017 and R2=0.25; P=0.020 respectively) to the average output power from mobile phones in the different counties.

Deaths due to diseases in the nervous system started to increase drastically in 1997. There is also here a noticeable correlation (R2=0.37; P=0.0024) with the average output power from mobile phones in the different counties.

The most noticeable trend is the increasing number of deaths from Alzheimer's disease. No correlation was found for another neuralgic disease, ALS (R2=0.0072; P=0.71). [ALZHEIMERS DISEASE, TRANSMITTERS ARE ON ELDERLY HOMES]

Conclusion

We note that 1997 was a very curious year in that a large number of health-related measures suddenly started to indicate a fast degradation in the health of the Swedish population.

Several health characteristics and diseases seem to correlate with the Swedish introduction of the GSM 1800MHz system both in time and place.

We urge responsible authorities to start an independent enquiry and to assign a scientific task force on a national basis to investigate possible consequences of the results presented here.

All health-related data are available at official national registries