

Diabetes on Islands and Dirty Electricity (Letter to The Lancet rejected)

In the listings of fasting plasma glucose (FPG) and diabetes prevalence in 199 countries and territories by Goodarz et al, islands are over-represented in places with high blood glucose and diabetes prevalence. Nine of ten of the places with highest FBG in males are small islands, while none of the ten places with the lowest FPG are. I believe that this is due to exposure to high frequency voltage transients (dirty electricity) on electric utility wiring coming from generator brush arcing, bad wiring connections and from cell phone switching power supplies. Islands without fuel supplies are likely to import Diesel oil to fuel generators with arcing brushes. Dirty electricity DE is a term coined by the utilities to describe high frequency voltage transients riding along on the 50 and 60 Hz transmission frequencies. DE is generated by arcing, sparking and any device that interrupts current flow, like compact fluorescent lights, computers, all transmitters, including cell towers, and inverters used in wind mills and photovoltaic solar arrays. These data are also consistent with a dirty electricity etiology in that places without electricity like sub-Saharan Africa and south east Asia have low FPG and diabetes prevalence. Unfortunately, the epidemic of the so called diseases of civilization, including diabetes, cardiovascular diseases, cancer and suicide began with electrification and Thomas Edison in New York City in the early 1800s. Historical US mortality data and US census electrification data, demonstrate this connection^{2,3,4}.

1. Goodarz D, Finucane MM, Lu Y et al. National, regional, and global trends in fasting plasma glucose and diabetes prevalence since 1980: systematic analysis of health examination surveys and epidemiologic studies with 370 countries and 2.7 million participants. *Lancet* 2011; 378: 31-40.

2. Milham S. Historical evidence that electrification caused the 20th century epidemic of disease of civilization. *Medical Hypotheses* 74, (2010): 337-345.

3. Milham S. *Dirty Electricity*, Bloomington Indiana USA, iUniverse. 2010.

4. www.sammilham.com.

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