Human Microchipping: yes or NO?

Preprint · August 2020

DOI: 10.13140/RG.2.2.28398.02888

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A RFID chip is a microchip that can transmit a static identifier or serial number for a short distance. Problems associated with human microchipping are infringed privacy, tracking of the person´s physical and financial movements, danger of hacking the personal data, physical health problems (thermal and stimulation effects) and psychological problems. A potential benefit could include storing a person's complete medical history.

A RFID chip is a microchip that can transmit a static identifier or serial number for a short distance. Research is being done to help people medically with RFID technology. Microchips can help advance prosthetics use, help people hear better, or possibly even help paralyzed people move. The technology is available and being used to implant people with microchips[1].

Problems associated with human microchipping are:

1. Person´s privacy could be severely infringed upon.
2. Person´s movements, both physically and financially, could be tracked.
3. Personal data about a person could be sold or hacked into.
4. Who would have access to the information, and who stores the information?
5. There are potential physical health problems and negative psychological effects.

Physical response to the causal effects of electromagnetic radiation includes[2]:

1. Thermal effects: thirst, tiredness, nausea, vertigo, reduction in sweat rate, hot dry skin, muscle cramps, convulsions, coma and possible death. One in every three individuals who survive a near-fatal case of increased core temperature remains permanently disabled with multi-system organ dysfunction.
2. Stimulation effects: whether local or diffused, include muscle spasm, an internalized buzzing sensation, seizures, possible brain hemorrhages, breathing paralysis, psychological changes (short-term memory problems, personality

changes), irritability, sleep disturbances, and irregular heartbeat.

3. On a cellular level, or micro-level, it is possible that cell membranes could rupture damaging cells and leaking fluid, causing edema, what can lower blood pressure, causing a loss of blood to the brain and other vital organs, with visible symptoms such as fainting, coma and possible death.

Other negative psychological effects are anxiety because of the possibility of being traced or hacked, and depression because of infringed privacy.

A potential benefit could include storing a person's complete medical history, or at the bare minimal the drugs that they are taking or are allergic to[3].

Wisconsin (USA) started the trend for outlawing mandatory microchipping in humans, enacting its law against forced microchipping in 2006. That is two years after the FDA approved implantable chips for humans, and long since veterinarians started using them on animals to help lost pets find their way home[4].

Microsoft registered a patent **WO/2020/060606** described as Cryptocurrency system using body activity data: ˝Human body activity associated with a task provided to a user may be used in a mining process of a cryptocurrency system. A server may provide a task to a device of a user which is communicatively coupled to the server. **A sensor communicatively coupled to or comprised in the device of the user may sense body activity of the user. Body activity data may be generated based on the sensed body activity of the user.** The cryptocurrency system communicatively coupled to the device of the user may verify if the body activity data satisfies one or more conditions set by the cryptocurrency system, and award cryptocurrency to the user whose body activity data is verified[5].˝

The microchip-based implant for contraception, originally developed at the Massachusetts Institute of Technology by researchers Langer R. and Cima J. Michael, is protected by 98 patents granted and 19 patent applications pending. Microchips, with the support of the Gates Foundation (Bill and Melinda Gates) in the form of approximately $17.9 million in grant funding to date, has been developing an **implantable long-acting, reversible contraceptive application** of the technology, which, if successful, will provide women with unparalleled control over the management of their fertility, which can be individually timed to meet

her family planning goals and objectives. The device is intended to deliver all the benefits of a traditional long-acting, reversible contraceptive product, utilizing the active pharmaceutical ingredient levonorgestrel, to provide precise dosing and extended implant duration with the added flexibility of wirelessly controlling the duration of ovulatory suppression based on individual user needs[6].

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