When politics obstructs self-correction in science

Mitchell Valdes-Sosa

Conspiracy theories and false beliefs are usually not endorsed by scientific bodies or government agencies, which tend to counteract their propagation. However, the case of the 'Havana Syndrome' seems to be an exception. Unfortunately, for almost 6 years, the dubious idea that U.S. diplomats and spies worldwide were suffering from a novel brain disorder caused by attacks with a mysterious 'energy' weapon prospered in the mainstream media. It was also implicitly endorsed by a prestigious medical journal (Swanson et al., 2018) and propagated by physicians and U.S. government officials. It took a joint statement (IC, 2023) by seven U.S. intelligence agencies (after an expensive and laborious review) to deflate the 'narrative' (officially known now as Anomalous Health Incidents or AHI). Mistaken hypotheses are a normal part of scientific inquiry, but science (under normal circumstances) tends to self-correct. In this case, science was not encouraged to self-correct and was hampered in doing so.

The article by Bartholomew and Baloh (this issue) clearly outlines many of the factors that contributed to this unusual situation, and the lack of a critical response of the scientific community is not one of these. Many scientists expressed clear objections, based on the presented data, to the claims of a novel brain disorder and a mysterious 'energy' weapon (e.g., Della Sala & Cubelli, 2018). The role of psychogenic propagation in these incidents was forcibly argued by Bartholomew and Baloh in a series of articles and a book (Baloh & Bartholomew, 2020) and is well reviewed in their article. This hypothesis was dismissed by proponents of the Havana Syndrome narrative by attacking a 'straw man', that is assuming erroneous beliefs on how and who could be afflicted by psychogenic disorders while arguing that these were not valid for the affected individuals.

In 2022, a standing committee of the Cuban Academy of Sciences (2022) issued a review of the publicly available information and local investigations carried out in Havana and concluded that the Havana Syndrome 'narrative was not scientifically acceptable in any of its components and had survived due to a biased use of science'. It suggested that 'some U.S. employees while stationed in Havana felt ill due to a heterogeneous collection of medical conditions, some pre-existing before going to Cuba and others acquired due to mundane causes' and that no 'known form of energy can selectively cause brain damage . . . International Journal of Social Psychiatry I-2 © The Author(s) 2023 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/00207640231207571 journals.sagepub.com/home/isp

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under the conditions described for the alleged incidents in Havana'. The review also stated that 'all the conditions for psychogenic propagation of malaise were present in this episode, probably including an inadequate initial medical response, the early official U.S. government endorsement of an 'attack' theory, and sensationalist media coverage, among others'.

It is interesting that in March 2023, the Updated Assessment of the AHI by the U.S Intelligence Community (Office of the Director of National Intelligence, 2023) stated: 'there is no credible evidence that a foreign adversary has a weapon or collection device that is causing AHIs', and 'While initial medical studies concluded AHIs represented a novel medical syndrome or consistent pattern of injuries similar to traumatic brain injury (TBI), a combination of medical and academic critiques pointed to methodological limitations in that work. Furthermore, the JASON panel's review of preliminary data from a National Institutes of Health (NIH) longitudinal study on AHIs in 2021 does not convey a consistent set of physical injuries, including neurologic injuries such as TBI'. It also states that 'symptoms reported by US personnel were probably the result of factors that did not involve a foreign adversary, such as preexisting conditions, conventional illnesses, and environmental factors. IC confidence in this explanation is bolstered by the fact that we identified medical, environmental, and social factors that plausibly can explain many AHIs reported by US officials'.

So, if Cuba and the U.S. now agree on the outcome, why did it take so much time to reject the false narrative? In an Op-Ed in *Scientific American* (Valdes-Sosa, 2023) I argue that confirmation bias (making data fit an unverified assumption), sidelining inconvenient arguments and of a lack of engagement with all the interested parties were responsible for this failure in the scientific procedure of self-correction. The idea of an attack was uncritically accepted by U.S. government officials. Much of the subsequent inquiries were built on this assumption. As

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Bartholomew and Baloh observe, discrepant voices were ignored. It is interesting that discussions on the Havana Syndrome in the U.S. largely ignored opinions from Havana. It is impossible to ignore the role of politics in this situation, and political convenience is a bad guide for science. We can only hope that the appropriate lessons were learned and that the harm that was inflicted can be mitigated.

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