**COMMENT**

**Are we ready for a ‘Nudge’?**

Mario Vaz,

Head, Health and Humanities, St. John’s Research Institute, Bengaluru 560034

Tel: 080-40467203

Email: [mariovaz@sjri.res.in](mailto:mariovaz@sjri.res.in)

Author’s statement:

This work is unfunded. The author has no competing interests. No similar work has been published by the author.

**Abstract**

A ‘nudge’ is a non financial behavioral intervention that seeks to alter people’s behavior in a predictable way without limiting choices. This builds on the idea that people are not always rational and do not always act in their best interests. The ethical construct of ‘nudges’ is developed around the idea of ‘libertarian paternalism’ – a softer form of paternalism than conventional rules, laws, fines and penalties. ‘Nudge Units’ are now a part of government institutions in various countries of the world and seek to use behavioral interventions to promote government policies and programs. It is pertinent to ask whether this approach has a role in a developing country like India for public health interventions and improving the quality of the doctor-patient encounter, among others. This article is written around four broad themes; the concept of a ‘nudge’, the role of ‘nudge’ in public health and clinical practice, the ethical construct of ‘nudge’ and the potential role of ‘nudge’ in India in the context of health.

(165 words)

In 2008 Thaler and Sunstein published a book entitled “*Nudge. Improving decisions about health, wealth and happiness*.” (1) At the time of the publication, Richard Thaler was a Professor of Behavioral Science and Economics at the University of Chicago and Cass Sunstein was Professor of Jurisprudence at the University of Chicago Law School and Department of Political Science. Since then, Pubmed reveals that there are hundreds of publications related to the field of Nudging, public health and ethics.

The concept of a nudge

So what exactly is a “nudge” and why should we be discussing this? Thaler and Sunstein introduce the concept of a nudge with two examples. The first is a hypothetical cafeteria experiment where the intent is to determine whether the way in which food is displayed and arranged might influence the choices that customers make – one option in the arrangement would be to promote healthier eating but other alternatives exist, such as making more profits. The second example is a real experiment at Schipol Airport in Amsterdam, The Netherlands, where to reduce the spillage in the urinals in the men’s rooms, the image of a black fly was etched into each urinal – spillage reduced by 80%! In these examples, the arrangement of food and the etched fly in the urinal constitute the ‘nudge’. The individual/institution responsible for the nudge is called the ‘choice architect’ and the environment in which the nudge occurs is the ‘choice architecture.’ Thaler and Sunstein define a nudge as ‘any aspect of the choice architecture that alters people’s behavior in a predictable way without forbidding any options or significantly changing their economic incentives’. To count as a nudge, interventions must be easy and cheap to avoid. Nudges are different from mandates and legislation. Thus, as Thaler and Sunstein qualify – putting fruit at eye level in a food display would count as a nudge but banning junk food would not.

The role of Nudge in clinical practice and public health

It is easy to understand that the concept of ‘nudging’ to promote healthy living would find resonance with those engaged in promoting positive behavior change in the field of clinical medicine, public health and research. Thus, nudges have been evaluated in relation to healthy eating in the workplace (2,3), among children (4), adolescents (5) and adults (6), in buffets (7); reducing sugar-sweetened beverage consumption (8); increasing physical activity in the workplace (9); promoting weight loss (10); promoting hand washing among school children (11); in matters of health insurance (12); smoking cessation (13,14); reducing cardiovascular risk (15); improving clinical trial enrollment (16); understanding clinician-patient interactions (17,18); and promoting treatment or best practice guidelines (19), among others.

The ethical construct of Nudge and a critique

At the root of ‘nudge’ theory is the view that human beings are not always rational and do not always make choices that are in their best interests. If this were false, then human beings on given a set of choices in a neutral way would always and consistently, make a choice in their best interest. We know that this is not true; we eat food which is unhealthy, succumbing to transient hedonism, despite a clear understanding of the longer term consequences on our health. Thus, emerges the concept of ‘bounded rationality’; the decisions we make are influenced both by context and environment.

Thaler and Sunstein described the ethical construct of the use of a nudge to change behavior as ‘Libertarian Paternalism’. The combination of these two apparently contradictory words is explained by the authors as ‘liberty-preserving paternalism’ – one in which an individual retains the freedom of choice and where, paternalism as a result is ‘relatively weak, soft and non intrusive.’ This contrasts with ‘hard paternalism’ which is most often enforced by institutions or the state as rules, laws, fines etc.

The fact that an individual retains the ability to choose but is merely ‘nudged’ towards a particular choice can be seen as interfering with personal autonomy even if autonomy is still retained. In the clinical area, some argue that the decision of clinicians to "frame" information in a way which "nudges" patients into making choices that maximize their welfare is a compromise between autonomy and paternalism and seeks to address the "reasoning failure" in patients (17).

One of the concerns about nudges, and particularly those that are financial (sometimes used by behavioral economists), is that they may reduce intrinsic motivation. Thus, in the example of blood donations, for instance, financial incentives may increase the number of donors but may also dissuade donors who were doing it for free i.e. without any financial incentive – the result is a market transaction rather than a social choice (20).

An additional concern about nudging is that shame can serve as a nudge, and that a nudge can also result in shame. An example cited by Eyal, is that of Directly Observed Therapy (DOT) for tuberculosis (21). The observer is the nudge and has no authority or power to take action on a non-compliant patient. However, the majority of patients comply. It is conceivable in such a situation, that a patient who might otherwise want to refuse treatment would not do so, because of embarrassment or shame, or stigmatization by the observer. Similarly, the confinement of smokers to smoking rooms, and of shaming smokers through advertisements, may be associated with considerable perceived stigma among smokers, notwithstanding the public health importance of reducing tobacco use. The increased stigma associated with smoking (22) may not only hamper efforts at quitting, but may also particularly affect those with smoking related illnesses including lung cancer, resulting in avoidance or delay in accessing treatment (23). This requires us to deliberate whether shaming or that which stigmatizes is ever acceptable as a nudge. There is now a call for public health campaigns to include themes that counter the effects of stigmatization and for health care professionals to communicate with empathy so as to reduce the effects of stigma on patients with tobacco-related diseases (23).

Integral to ‘nudging’ is the ‘choice architect’; an individual or institution, even the State, which conceptualizes and implements the nudge. Trustworthiness and transparency is critical to be acceptable as a choice architect. These elements of acceptability are created over a period of time, reinforced by actions that are seen to be consistently moral and in the best interests of the public. However, in the absence of trust and transparency, choice architects may be seen as being manipulative, serving vested interests, and working against the very constituency that they are meant to represent. A counter to this argument is that information in the world is more accessible than ever before, allowing people to make judgments about the motives of the choice architect. There is also more public debate and available means to recourse and justice. Nevertheless, where social disparities are high, as are power imbalances, the responsibilities of the choice architect are greater, particularly since there is some concern that ‘nudges’ work best in the dark i.e. when people are less informed.

Nudge and India

Nudges have been criticized as ethically debatable because they circumvent an individual’s reasoning and are of limited use in situations where the underlying causes results from social determinants, such as poverty, and where choices are limited (24). The use of nudges in India should, thus, not be a replacement for the greater issue of addressing the social determinants of health, including poverty. Another issue is whether the state as a ‘choice architect’ can see itself having a ‘softer’ paternalistic role than its conventional resort to wide sweeping rules and regulations to mitigate public health issues. A classic example of the two approaches, and these may well work in concert, is the attempt to reduce drink-driving in Australia. Thus, traditional ‘hard paternalism’ of fines and license disqualification and suspension has been complemented by softer paternalistic nudges such as television campaigns including “drink, drive, bloody idiot.” (25) I draw on this example to highlight the potential space that nudging has in the Indian context, in diverse areas, including the promotion of hand washing, use of walkways and pedestrian crossings instead of darting across roads, making healthy food choices, promoting physical activity and exercise, and using stairs instead of elevators, among others.

Beyond public health, nudges can play an important part in the quality of the patient-doctor encounter. Studies have shown that a simple display of a commitment not to prescribe antibiotics irrationally can reduce antibiotic prescriptions by as much as 20% (19). Along similar lines, would the display of the Doctor’s Oath or the MCI ethical guideline in every consultation room promote more ethical behavior? The provision of patient feedback forms outside each consultation room of a doctor may also increase the quality of the patient-doctor interaction (18).

In 2016, a newspaper article suggested that NITI Aayog was planning a ‘nudge unit’ to enhance the government’s flagship schemes such as Swachh Bharat, Jan Dhan Yojana and Skill Development through social messaging and new ad campaigns, possibly with the help of the Bill and Melinda Gates Foundation. (26) In response to this, a commentator cautioned that a behavioral science principle was not necessarily universally valid, that there were concerns about replicability, and that complex problems needed multidisciplinary approaches. (27). In February 2018, post the Union Budget, an article by a behavioral economist raised questions about the existence of the “Nudge Unit” in India - “It’s impossible to know whether NITI Aayog’s Nudge Unit has been set up and what it is working on. Neither the NITI Aayog website nor the BMGF website has any information that hints at setting up of such a unit.” Indeed, the article added that the Government had cut ties with the Bill and Melinda Gates Foundation on a health mission due to an apparent conflict of interest. (28)

The UK established a Behavioral Insights Unit (BIT) in 2010, under the Cabinet Office. Countries that followed suit and which included the US, Australia, Canada, Netherlands, and Germany, aimed to implement the application of behavioral insights to national policies and programs. While there continue to be concerns about behavioral manipulation and limitation of choices, proponents of ‘nudges’ point out that governments have always been applying ‘choice architecture’ and nudging, even if it was not called so. (29) Even so, there is a sense that transparency and accountability in behavioral interventions is critical to ensuring trust in government and government institutions. In this connection, it is interesting that Lowenstein and others, determined that disclosure of a default option did not affect nudge, thus countering the notion that nudge is unethical since people are usually unaware of the fact that they are being nudged (30).

I believe that ‘nudge’ is an integral part of promoting behavior change alongside other measures including the provision of basic information, and the application for greater public good, of measures such as laws, fines etc. However, in a country such as India, where social and health inequalities are extensive, transparency and accountability of behavioral interventions are key to maintaining the trust of the people in public institutions. This can be achieved by a more inclusive approach to the development of behavioral interventions. We also need to be cognizant about the ethical concerns regarding nudges regardless of the counter-arguments.

(1870 words)

**Acknowledgements**

I would like to thank Olinda Timms, Manjulika Vaz and Radhika Hegde of the Division of Health and Humanities, St. John’s Research Institute, for the useful comments on a seminar leading to this manuscript.

**References**

1. Thaler RH, Sunstein CR. Nudge. Improving decisions about health, wealth and happiness. New International Edition. Penguin Books, London, England. 2009
2. Vasiljevic M, Cartwright E, Pechey R, Hollands GJ, Couturier DL, Jebb SA, Marteau TM. [Physical micro-environment interventions for healthier eating in the workplace: protocol for a stepped wedge randomised controlled pilot trial..](https://www.ncbi.nlm.nih.gov/pubmed/28616251)Pilot Feasibility Stud. 2017 Jun 9;3:27. doi: 10.1186/s40814-017-0141-z. eCollection 2017.
3. Velema E, Vyth EL, Steenhuis IH.[Using nudging and social marketing techniques to create healthy worksite cafeterias in the Netherlands: intervention development and study design.](https://www.ncbi.nlm.nih.gov/pubmed/28077114) BMC Public Health. 2017 Jan 11;17(1):63. doi: 10.1186/s12889-016-3927-7.
4. van Kleef E, Vrijhof M, Polet IA, Vingerhoeds MH, de Wijk RA. Nudging children towards whole wheat bread: a field experiment on the influence of fun bread roll shape on breakfast consumption. BMC Public Health. 2014 Sep 2;14:906. doi: 10.1186/1471-2458-14-906
5. Pearson N, Griffiths P, Biddle SJ, Johnston JP, McGeorge S, Haycraft E. [Clustering and correlates of screen-time and eating behaviours among young adolescents.](https://www.ncbi.nlm.nih.gov/pubmed/28569188) BMC Public Health. 2017 May 31;17(1):533. doi: 10.1186/s12889-017-4441-2.
6. Arno A, Thomas S The efficacy of nudge theory strategies in influencing adult dietary behaviour: a systematic review and meta-analysis. BMC Public Health. 2016 Jul 30;16:676. doi: 10.1186/s12889-016-3272-x
7. Friis R, Skov LR, Olsen A, Appleton KM, Saulais L, Dinnella C, Hartwell H, Depezay L, Monteleone E, Giboreau A, Perez-Cueto FJA. [Comparison of three nudge interventions (priming, default option, and perceived variety) to promote vegetable consumption in a self-service buffet setting.](https://www.ncbi.nlm.nih.gov/pubmed/28562678) PLoS One. 2017 May 31;12(5):e0176028. doi: 10.1371/journal.pone.0176028. eCollection 2017.
8. Petrescu DC, Hollands GJ, Couturier DL, Ng YL, Marteau TM. Public Acceptability in the UK and USA of Nudging to Reduce Obesity: The Example of Reducing Sugar-Sweetened Beverages Consumption. PLoS One. 2016 Jun 8;11(6):e0155995. doi: 10.1371/journal.pone.0155995. eCollection 2016.
9. Åvitsland A, Solbraa AK, Riiser A. [Promoting workplace stair climbing: sometimes, not interfering is the best.](https://www.ncbi.nlm.nih.gov/pubmed/28078084) Arch Public Health. 2017 Jan 9;75:2. doi: 10.1186/s13690-016-0170-8. eCollection 2017.
10. Seeman N. Move if u wanna: Obama and the weight loss nudge. CMAJ. 2011 Jan 11;183(1):152.
11. Dreibelbis R, Kroeger A, Hossain K, Venkatesh M, Ram PK. Behavior Change without Behavior Change Communication: Nudging Handwashing among Primary School Students in Bangladesh.Int J Environ Res Public Health. 2016 Jan 14;13(1)
12. van Winssen KP, van Kleef RC, van de Ven WP. Potential determinants of deductible uptake in health insurance: How to increase uptake in The Netherlands? Eur J Health Econ. 2016 Dec;17(9):1059-1072.
13. Sunstein CR. Nudging smokers. N Engl J Med. 2015 May 28;372(22):2150-1. doi: 10.1056/NEJMe1503200. Epub 2015 May 13.
14. Blankers M, Buisman R, Hopman P, van Gool R, van Laar M. Modelling intentions to provide smoking cessation support among mental health professionals in the Netherlands.Tob Induc Dis. 2016 Aug 26;14(1):32. doi: 10.1186/s12971-016-0096-5. eCollection 2016.
15. Holt TA, Thorogood M, Griffiths F, Munday S. Protocol for the 'e-Nudge trial': a randomised controlled trial of electronic feedback to reduce the cardiovascular risk of individuals in general practice [ISRCTN64828380].Trials. 2006 Apr 28;7:11.
16. VanEpps EM, Volpp KG, Halpern SD. A nudge toward participation: Improving clinical trial enrollment with behavioral economics. Sci Transl Med. 2016 Jul 20;8(348):348fs13. doi: 10.1126/scitranslmed.aaf0946. Review.
17. Aggarwal A, Davies J, Sullivan R. "Nudge" in the clinical consultation--an acceptable form of medical paternalism? BMC Med Ethics. 2014 Apr 17;15:31. doi: 10.1186/1472-6939-15-31.
18. Methven S, Caskey F. Putting the patient first: should we nudge them or shove them?Nephrol Dial Transplant. 2014 May;29(5):941-3.
19. Meeker D, Knight TK, Friedberg MW, Linder JA, Goldstein NJ, Fox CR, Rothfeld A, Diaz G, Doctor JN. Nudging guideline-concordant antibiotic prescribing: a randomized clinical trial. JAMA Intern Med. 2014 Mar;174(3):425-31
20. Titmuss RM. The gift relationship-From human blood to social policy. 1970, Allen and Unwin, London, UK. . Referred to in Matteo M. Galizzi. Label, nudge or tax? A review of health policies for risky behaviours. Journal of Public Health Research 2012; 1:e5
21. Eyal N. Nudging by shaming, shaming by nudging. Int J Health Policy Manag 2014, 3(2), 53–56

# [Evans-Polce](https://www.ncbi.nlm.nih.gov/pubmed/?term=Evans-Polce%20RJ%5BAuthor%5D&cauthor=true&cauthor_uid=26439764) RJ, [Castaldelli-Maia](https://www.ncbi.nlm.nih.gov/pubmed/?term=Castaldelli-Maia%20JM%5BAuthor%5D&cauthor=true&cauthor_uid=26439764) JM, [Schomerus](https://www.ncbi.nlm.nih.gov/pubmed/?term=Schomerus%20G%5BAuthor%5D&cauthor=true&cauthor_uid=26439764) G,[Evans-Lacko](https://www.ncbi.nlm.nih.gov/pubmed/?term=Evans-Lacko%20SE%5BAuthor%5D&cauthor=true&cauthor_uid=26439764) SE. The Downside of Tobacco Control? Smoking and Self-Stigma: A systematic review. [Soc Sci Med. 2015 Nov; 145: 26–34.](https://www.ncbi.nlm.nih.gov/entrez/eutils/elink.fcgi?dbfrom=pubmed&retmode=ref&cmd=prlinks&id=26439764)

# [Riley](https://www.ncbi.nlm.nih.gov/pubmed/?term=Riley%20KE%5BAuthor%5D&cauthor=true&cauthor_uid=28553905) KE, PhD, [Ulrich](https://www.ncbi.nlm.nih.gov/pubmed/?term=Ulrich%20MR%5BAuthor%5D&cauthor=true&cauthor_uid=28553905) MR, [Hamann](https://www.ncbi.nlm.nih.gov/pubmed/?term=Hamann%20HA%5BAuthor%5D&cauthor=true&cauthor_uid=28553905) HA, [Ostroff](https://www.ncbi.nlm.nih.gov/pubmed/?term=Ostroff%20JS%5BAuthor%5D&cauthor=true&cauthor_uid=28553905) JS. Decreasing Smoking but Increasing Stigma? Anti-tobacco Campaigns, Public Health, and Cancer Care. [AMA J Ethics. 2017 May 1; 19(5): 475–485.](https://www.ncbi.nlm.nih.gov/entrez/eutils/elink.fcgi?dbfrom=pubmed&retmode=ref&cmd=prlinks&id=28553905)

1. Allmark P, Tod AM. Can a nudge keep you warm? Using nudges to reduce excess winter deaths: insight from the Keeping Warm in Later Life Project (KWILLT).J Public Health (Oxf). 2014 Mar;36(1):111-6.
2. Dore J. Improving road safety: perspectives from Victoria’s Transport Accident Commission. <http://press-files.anu.edu.au/downloads/press/p112401/pdf/ch16.pdf> downloaded on 10th April, 2018.
3. The Economic Times. 7th Sept, 2016. <https://economictimes.indiatimes.com/news/economy/policy/niti-aayog-plans-nudge-unit-to-help-push-governments-flagship-schemes/articleshow/54041144.cms> downloaded on 12th April, 2018.

# Prasad R. India’s behavioral science policy unit – Challenges and way forward. 15th Sept, 2016. <http://finalmile.in/behaviourarchitecture/indias-nudge-unit> downloaded on 24th April, 2018.

# Gupta N. Where is the Nudge Unit? 1st February, 2018. https://www.thinkpragati.com/opinion/3361/where-is-the-nudge-unit/ downloaded on 12th April, 2018.

1. Afif Z. “Nudge units” – where they came from and what they can do. <http://blogs.worldbank.org/developmenttalk/nudge-units-where-they-came-and-what-they-can-do> downloaded on 12th April, 2018.
2. Loewenstein G, Bryce C, Hagmann D, Rajpal S. Warning: You are about to be nudged. <https://www.cmu.edu/dietrich/sds/docs/loewenstein/WarningAboutNudged.pdf> downloaded on 12th April, 2018.