



Lowbury Lecture 2013

Cultural determinants of infection control behaviour: understanding drivers and implementing effective change

M.A. Borg*

Mater Dei Hospital and University of Malta, Msida, Malta

ARTICLE INFO

Article history:

Received 18 December 2013

Accepted 28 December 2013

Available online 14 January 2014

Keywords:

Behaviour change

Empowerment

Hofstede

Professional culture

SUMMARY

Despite dealing with biomedical practices, infection prevention and control (IPC) is essentially a behavioural science. Human behaviour is influenced by various factors, including culture. Hofstede's model of cultural dimensions proposes that national cultures vary along consistent dimensions which can be grouped and scored as specific constructs. Studies have reported that three Hofstede constructs – power distance, uncertainty avoidance, and masculinity – show significant association with several key performance indicators relevant to IPC and antibiotic stewardship. In addition, national meticillin-resistant *Staphylococcus aureus* (MRSA) levels within Europe correlate well with general quality-of-care indices, including preventive strategies and patient rights. This suggests that IPC may be simply a microcosm of overall quality and safety standards within hospitals and countries. Effective improvement would therefore need to address underlying and embedded core cultural values relevant to patient safety and quality of care. Successful IPC strategies are likely to be those that are compatible with the cultural background where they are implemented. To this end, content analysis of many current IPC improvement tools identifies elements of strong compatibility with cultures that are low in uncertainty avoidance and power distance, and high in individualism and masculinity. However, this cultural combination is largely restricted to Anglo-Saxon countries, where most of the recent improvements in healthcare-associated infection (HCAI) incidence have taken place. There is a paucity of research on IPC behaviour change in different cultural backgrounds, especially countries that score high for power distance and/or uncertainty avoidance. This information is vital to inform IPC campaigns in these countries, which often show high HCAI prevalence.

© 2014 The Healthcare Infection Society. Published by Elsevier Ltd. All rights reserved.

Introduction

Despite dealing with biomedical practices, infection prevention and control (IPC) is essentially a behavioural science. This point of departure would offer a plausible explanation why

IPC practices vary so remarkably between hospitals and countries, despite an overwhelming volume of evidence-based literature and a plethora of low-cost improvement tools.¹ Considerable variations in key performance indicators (KPIs) – both process and outcome – relevant to infectious diseases even occur within geographical regions exhibiting similar socio-economic denominators. This is particularly the case for the countries of the European Union (EU) where a threefold variation in ambulatory care antibiotic consumption has been

* Department of Infection Control, Mater Dei Hospital, Msida, Malta. Tel.: +356 2545 4528; fax: +356 2545 7474.

E-mail address: michael.a.borg@gov.mt.

reported.² EU countries with higher antibiotic utilization tend to use wider-spectrum formulations.³ They also have greater levels of non-prescribed use, as well as incongruous prescribing for colds, 'flu, and sore throat.^{4,5} This inconsistency is not restricted to the community. A recent point prevalence study (PPS) undertaken by the European Centre for Disease Prevention and Control (ECDC) found very wide differences in antibiotic surgical prophylaxis beyond 24 hours, despite this practice being ineffective.⁶ Variation is also evident in outcome indicators of healthcare-associated infections (HCAIs). For more than a decade, comparable surveillance of MRSA proportions in blood cultures has been ongoing in the majority of EU countries. The results from the European Antimicrobial Resistance Surveillance System (EARSS), now EARS-Net, have consistently shown a low prevalence of MRSA in almost all Northern European countries, which then increases into central Europe and reaches its highest levels in the Mediterranean region.⁷ The southern and eastern countries of Europe concurrently show high prevalence of other multi-resistant nosocomial pathogens, including *Klebsiella pneumoniae* and *Acinetobacter baumannii*.⁸

Incidence of MRSA bloodstream infections has been advocated to be an accurate marker of the effectiveness of IPC programmes.⁹ To this end, several publications have looked at the epidemiology of MRSA within Europe. They have concluded that countries with lower MRSA proportions showed stricter implementation of IPC policies within hospitals, especially antibiotic prescribing, use of alcohol hand rub, and adoption of isolation policies.^{10,11} Yet they do not explain why such differences should be present, especially considering the common initiatives and soft legislation related to antibiotic use and IPC spearheaded by the European Commission during the past decade.¹²

Hofstede's national culture models

Hofstede's model of cultural dimensions is one of the most accepted approaches for analysing behavioural differences between countries, with more than 800 citations in peer-reviewed journals. It defines culture as the collective programming of the mind that distinguishes the members of one group or category of people from another. Hofstede formulated a model which proposes that national cultures vary along consistent, fundamental dimensions that can be grouped and scored as specific constructs: power distance (PDI), individualism (IDV), masculinity (MAS) and uncertainty avoidance (UAI). Later, in collaboration with other colleagues, he identified two more dimensions: pragmatic long-term versus normative short-term orientation (LTO) and indulgence versus restraint (IVR) (Box 1).¹³ Several of these have been reported to show significant association with KPIs relevant to IPC and antibiotic stewardship.^{5,14–16}

Uncertainty avoidance

Uncertainty avoidance has consistently shown the highest level of correlation.^{15,16} This concordance is backed by a strong theoretical plausibility. Of all the cultural constructs, UAI would be the one expected to impact heaviest on IPC and antibiotic-related behaviour. Hofstede describes UAI as a measure of the national ability to adapt to ambiguous

Box 1

Hofstede's definitions for the six cultural dimensions

- Power distance (PDI) relates to the extent to which the less powerful members of organizations and institutions accept and expect that power is distributed unequally. It suggests that a society's level of inequality is endorsed by the followers as much as by the leaders.
- Uncertainty avoidance (UAI) indicates to what extent a society tolerates uncertainty and ambiguity, and it shows how comfortable its members feel in unstructured situations which are novel, unknown, surprising or different from usual.
- Individualism (IDV) is the degree to which individuals are integrated into tight groups (collectivist) or loose groups (individualist).
- Masculinity (MAS) refers to the distribution of roles between the genders. In masculine cultures, ego needs, assertiveness and success are emphasized. In feminine cultures, caring for the weak and quality of life are more important.
- Long-term orientation (LTO) reflects long-term pragmatic attitudes versus short-term normative attitudes. Cultures scoring high on this dimension show emphasis on future rewards, notably saving, persistence, and adapting to changing circumstances.
- Indulgence (IVR) reflects societies that allow people to enjoy life and have fun versus societies where restraint is emphasized.

situations.¹³ Antibiotic prescribing can offer a subconscious reassurance of certainty to the clinician. It would therefore be anticipated that in high UAI countries, the likelihood is greater that antibiotics will be administered in dubious clinical presentations ('just in case'). For the same reasons, they are likely to be administered for longer durations and wide-spectrum formulations would be more popular. High UAI societies tend to be regarded as exhibiting above-average expression of cognitive dissonance, cognitive economy and unrealistic optimism.¹⁷ All three psychosocial behavioural elements are well described as being non-conducive with effective IPC practice because the key to HCAI prevention is ultimately correct risk perception and management.¹⁸ Paradoxically, high UAI countries show greater levels of risk tolerance because risk will only be addressed if it creates uncertainty. For example, high UAI countries are characterized by poor driving practices (e.g. exceeding speed limits) despite having higher traffic accident mortality rates.¹⁹ Yet the association is ignored because it is not the driving behaviour that creates uncertainty but the stress caused by the anxiety of not arriving on time. Similarly, it is the effort and time that needs to be dedicated to IPC interventions that probably generates subconscious stress among healthcare professionals, in high UAI countries not – as might be expected – the far greater financial and human costs that would then be needed to treat patients who develop HCAIs. Personal unpublished research, using focus groups among nurses from such cultural backgrounds, has identified a very widespread perception that short-cuts are acceptable practice in order to get the work done and that documentation is an unnecessary chore that interferes in the delivery of efficient patient care. High UAI countries respond best to situations of certainty; they tend to be predominantly reactive in their approach, often adopting unnecessary dogma and

Download English Version:

<https://daneshyari.com/en/article/6122385>

Download Persian Version:

<https://daneshyari.com/article/6122385>

[Daneshyari.com](https://daneshyari.com)