

Behaviours and behaviour change: Implication for driving health security in Nigeria by 2050

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Abstract

Introduction: Behaviours are dynamic in their interactions and can change overtime based on different factors. Many factors affect people's behaviours, consequently resulting in behavior changes that present serious challenges to preventive health and health seeking behavior in Nigeria. Strategies to change behaviour are targeted towards different levels of individual, organisational, community and population levels, using multilevel interventions to bring about long-term sustainable behaviour change.

Situation analysis: Pertinent issues relating to sustainability of health and social care systems in the face of instability and conflict in some regions in the country threatens national health security. Globally, and as true for Nigeria, there is an urgency to address the 'triple burden of diseases' which includes ongoing threats of communicable diseases, and newly emerging and re-emerging diseases and recent increase in occurrence of noncommunicable diseases.

Forecast: Behaviour change contribution to achieving health security and sustainable development by 2050 could effectively address national health issues by adopting a holistic approach that encourage health promotion strategies and intersectoral action areas to build healthy public policy, create supportive environments for health, strengthen community action for health, develop personal skills, and re-orient health services, to build sustainable health systems.

Conclusion: Operationalising evidence-based practice and public health depends on behaviour change. Behaviour change interventions are vital for effective practice of medical science and public health, and other pertinent issues facing society.

Keywords: *Behaviours, behaviour change, Health security, health promotion*

Abstrait

Introduction : Les comportements sont dynamiques dans leurs interactions et peuvent changer tout au cour du temps en fonction de différents facteurs. De nombreux facteurs affectent le comportement des individus, entraînant par conséquent des changements de comportement qui posent de sérieux problèmes pour la santé préventive et le comportement en recherche de santé au Nigéria. Les stratégies visant à modifier les comportements ciblent différents niveaux d'individus, d'organisations, de communautés et de populations, en utilisant des interventions à plusieurs étapes pour provoquer un changement de comportement durable à long terme.

Analyse de la situation : Des problèmes pertinents liés à la durabilité des systèmes de santé et de protection sociale face à l'instabilité et aux conflits dans certaines régions du pays menacent la sécurité sanitaire nationale. Universellement, comme au Nigéria, il y a une urgence d'adresser le 'triple fardeau des maladies', qui comprend les menaces actuelles de maladies transmissibles, de maladies émergentes et ré-émergentes et de l'accroissement récent de l'incidence des maladies non transmissibles.

Prévisions : La contribution du changement de comportement pour aboutir à la sécurité sanitaire et au développement durable d'ici 2050 pourrait résoudre efficacement les problèmes de santé nationaux en adoptant une approche holistique qui encourage les stratégies de promotion de la santé et les domaines d'action intersectoriels afin de mettre en place des politiques publiques saines, de créer des environnements favorables à la santé, de renforcer l'action communautaire santé, développer des compétences personnelles et réorienter les services de santé afin de mettre en place des systèmes de santé durables.

Conclusion : La mise en opération de la pratique factuelle et de la santé publique dépend du changement de comportement. Les interventions visant à modifier les comportements sont essentielles à la pratique efficace de la science médicale et de la santé publique, ainsi qu'à d'autres problèmes pertinents auxquels la société est confrontée.

Mots - clés : *Comportements, changement de comportement, sécurité sanitaire, promotion de la santé*

Introduction

The social, cultural, physical and biological environments, where we live and interact are already determining individual or collective behaviours and

has implications for our health in 2050. Our values shape our behaviours and ultimately affects our health, and results in increasing epidemiology of disease and mortality, for example risk factors for non-communicable diseases. Behaviours are a product of complex systems of inter-relationships and collective beliefs that informs what people do or do not do. That is what we see, hear, speak and interact with, do, where we live, and the people we know, consistently shapes our values and eventually our behaviour; our behaviour ultimately affects our health.

Behaviour has been defined in the context of the individual 'behaviour to be an outcome of competing influences balanced and decided upon by the individual' [1]. Behaviour is the way that a person responds in a situation or under particular conditions. Behaviour change is a mirror reflecting an individual's growth and development. Integral to behaviours are determinants of health or factors such as genetic make-up, learning experiences, culture, religion, values, and attitudes; social norms also influence behaviour [2]. Behaviours can add or decrease a person's years of potential life [3], and it's a critical element in the interactions between health, disease and quality of life.

Health behaviours refer to any behaviours that impact on people's physical and mental health and quality of life [4]. It involves any activity undertaken by an individual, regardless of actual or perceived health status, for promoting, protecting or maintaining health, irrespective of whether such behaviour is objectively effective towards that end [5]. Health behaviours can be changed or modified based on people's choice and various factors influence this change. Health behaviour change includes processes that encourage abandonment of health-compromising behaviours and adoption of health-enhancing behaviours. Health policies should therefore be deliberately focused on restoring normalcy through deliberately targeted measures to manipulate individual, family and community resources to adopt behaviours that support positive health habits. However, Individuals are complex, and societies are dynamic. Personality, cultural, and environmental changes may prompt unhealthy practices. This often requires a change from unhealthy to health promoting practices.

Situation Analysis

Raising concerns about health security in Nigeria by the year 2050 with respect to behaviours and behaviour change is very important. Current trends

in the country can attest to the fact that there is decadence in the value chain and culture seems not to hold fast on right morals. Against this background are behavior changes and factors that present serious challenges to preventive health and health seeking behaviour in Nigeria. In addition are pertinent issues relating to sustainability of health and social care systems in the face of instability and conflict in some regions in the country, which threatens national health security. Health promotion which targets behaviour change is germane in addressing public health problems that threatens national health security.

Globally, and as true for Nigeria, there is an urgency to address the 'triple burden of diseases' which includes ongoing threats of communicable diseases, and newly emerging and re-emerging diseases and recent increase in occurrence of noncommunicable diseases. The World Health Organisation estimated that there were 792,600 NCDs related deaths in 2008 in Nigeria compared to HIV which was 240,000 [6]. For example, physical inactivity which is estimated to cause around 21–25% of breast and colon cancers, 27% of diabetes and about 30% of ischaemic heart diseases [7] is on the increase; the prevalence of physical inactivity in Nigeria was reported to be 41% among adults [8]. Globalisation, urbanization, advanced technologies, amongst a few, drive behaviors resulting in positive health outcomes on one hand but has a great contributory effect on negative/poor health outcomes on the other hand. National burdens that includes low life expectancy [9], mortality and morbidity rates, rise in non-communicable diseases and sedentary lifestyle and emerging and inherent communicable diseases, below standard expectation of total expenditure on health as percent of GDP (3.7%), and persistent inequalities among others, are all associated with individual or collective health behavior and requires positive behavior change.

Forecasts to 2050

Various factors affect the health security of people all over the world, especially in developing countries context. Beyond the health sector, different factors, including social, economic and political influence shape individual behaviour and circumstances, resulting in disparities in health and threatens health security. A holistic approach that looks beyond the traditional health sector, and targets behaviour change to all stakeholders, at community and other settings should be considered. This holistic approach embraces the concept of empowerment and capacity

Table 1: SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> • Existence of policies, for example, Health Promotion Policy; • Resilience of Nigerians in the face of enormous economic and social challenges; • Social Media as a medium to promote preventive health behaviour; • Expertise to develop strategies to address behavioural challenges • Community life and Religious systems 	<ul style="list-style-type: none"> • In policy implementation processes; • Poor education; • Inadequate funding; • Bad leadership • Political instability, public sector institutions are affected by high levels of corruption, agents of behaviour change are corrupt; on average across each of the public sector groups, half of the population or more said that they thought most or all (Religious leaders Traditional leaders Office of the presidency Local government councillors Members of parliament Judges and magistrates Tax officials Government officials Business executives Police) are corrupt and 78% of Nigerians highlighted that the government are doing badly in controlling corruption (Transparency International, 2015).
Opportunities	Threats
<ul style="list-style-type: none"> • Nigeria is a country of immense potentials with capital and manpower if harnessed positively with her population profile; • mobile health – e health; increase in technology output 	<p>Visible and invisible threats to behaviour change include:</p> <ul style="list-style-type: none"> • Implosion of socio-cultural context of health behaviour due to westernization and globalisation. Nigerians have shifted from hitherto positive to negative health habits, for example, sedentary lifestyle; consumption of high fat calories • Poor access to health information and education, inadequate information, and high awareness among the general populace about health-related issues but low knowledge, which translates to poor health seeking behaviour among the people • Poor health care services and lack of adequate health care providers, especially in rural settings, accessibility, health care cost influence societal health behaviour • Social norms and societal behaviour of stigmatization and discrimination hinders health seeking behaviour • Gender imbalance and male dominance in the traditional Nigerian culture hinders positive health-seeking behaviours • The social media is closely related to behaviour change, and negative influence of social media has impacted on behaviours of people. Increase in social media access has encouraged a lot of potential towards sedentary lifestyle, excessive alcohol intake; use of tobacco related products; consumption of calories in food - Identify risk factors for communicable and non-communicable diseases. • Violent crimes including religion/intertribal, Economic and social effects of all these; impact of the Niger Delta crisis on the Nigerian economy; Different socio-cultural differences.

Table 2: Proposed Plans, Deliverables and Sources of Funding

	Plans	Deliverables	Sources of Funding
Short term Timeline	Increase in awareness and knowledge of health promotion and education	<ul style="list-style-type: none"> • Trained Personnel • Media campaigns • Multimedia efforts targeted at behaviour change 	Federal, State and LGA <ul style="list-style-type: none"> • MOE • MOH • MOF
Medium Term Timeline	Interventions to provide support for behaviour change. Intervention functions could target the following [4]: <ul style="list-style-type: none"> • <i>Education (e.g., increasing parents' knowledge about the importance of a healthy diet)</i> • <i>Persuasion (e.g., inducing positive feelings to pack fruits and vegetables in children's lunchbox)</i> • <i>Incentivization (e.g., creating expectation of financial or other rewards if one packed fruits and vegetables in the child's lunchbox every day)</i> • <i>Coercion (e.g., increasing the cost of salty food and snacks)</i> • <i>Training (e.g., providing training to parents to improve their skills to cook with healthy ingredients)</i> • <i>Restriction (e.g., using rules to reduce purchasing of energy-dense food)</i> • <i>Environmental restructuring (e.g., using prompts in shops to increase the attractiveness of fruits and vegetables)</i> • <i>Modeling (e.g., providing an example for parents to aspire or imitate when managing their children's diet)</i> 	<ul style="list-style-type: none"> • Available people trained • Community based social marketing 	Federal, State and LGA <ul style="list-style-type: none"> • MOE • MOH
Long Term Timeline	Strategic planning for sustainable behaviour change. To ensure translation of positive health behaviours into population health, they must be sustained over the long run and factors influencing sustenance may differ from those	<ul style="list-style-type: none"> • Education for sustainability • Professional learning hub • Enthusiastic and competent project leaders and officers • Linkages between public and private organisations and health professionals • Multifaceted approach • Active and genuine involvement of all stakeholders in 	<ul style="list-style-type: none"> • F e d e r a l Government • External donor agencies • P r i v a t e partnership

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- evaluation of programmes
- Encouragement of pro-environmental behaviours
 - Harnessing innovative technologies
 - New research orientation to target peculiar indigenous problems & behaviours
 - utilising alternative behavioural approaches as a target to provide a broader context of policy options
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building in order to promote individual and community action for health and its determinants, and thus lead to improved health security [10].

Nigeria's aspiration for 2050, is targeted towards behaviour change for health, which should significantly surpass past and current trends. Nigeria projects for a future in which increasing population experiences substantial and sustainable improvements and equity in health, and health behaviour targeted at physical, mental, socio-cultural and health-related quality of life. Through public engagement activities, this aspiration is of inherent societal value. To actualise these, we must take a much broader assessment of all indices and drivers of health and development, including economic, GDP, housing, security, increased employment opportunities, and so on. Also, we must harmonise our research and behavioural theories within our cultural context and identify the types of evidence needed, current and future, for behaviour change interventions, in order to promote health and prevent diseases and ill health.

Presently, looking at current trends, the forecast appears grievous and gruesome; corruption is embedded in the societal fabric and it has become an acceptable norm. Young people grew up in a society that adapts to corruptible practices and offenders are not appropriately punished and ameliorated. There is therefore need for behaviour change across the device to avoid implosion, and behaviour change should target education of moral values as a catalyst for development in Nigeria from an early age. Techniques of behaviour change should be emphasised; effective behaviour change should target different levels of individual, organisational, community and population, and multilevel

interventions are very essential [4]. Health promotion behavioural theories and models at individual, social, physical and technology levels can be used to characterise and design behaviour change interventions at population, community and individual levels. These evidence-based principles of behaviour change can be conceptualised under three influences on behaviour, capability, opportunity and motivation. Operationalising evidence-based practice and public health depends on behaviour change [11], and behaviour change interventions are vital for effective practice of medical science and public health, and other pertinent issues facing society [11].

Table 1 highlights the strengths, weaknesses, opportunities and threats (SWOT Analysis) of behaviours to health security in Nigeria. Table 2 shows short, medium- and long-term behaviour change plans to improve health security in Nigeria, with deliverables and proposed source of funding.

Monitoring and evaluation of short, medium- and long-term behaviour change plans

Monitoring and evaluation processes should involve the following steps as highlighted below:

- Develop implementable and SMART objectives
- Develop indicators and checklists (e.g. WHO Checklist and Indicators for Monitoring Progress)
- Set out tasks and activities
- Monitoring focused on Inputs, Process/Functional outputs, Service outputs and outputs
- Evaluation focused on outputs, intermediate outcomes and long-term outcomes
- Monitoring and Evaluation tools

Monitoring and evaluation systems could include measuring indicators (what to do), methods (how it is being done), timing (when it is being done) and persons responsible for carrying out each task/plan as shown in Figure 1.

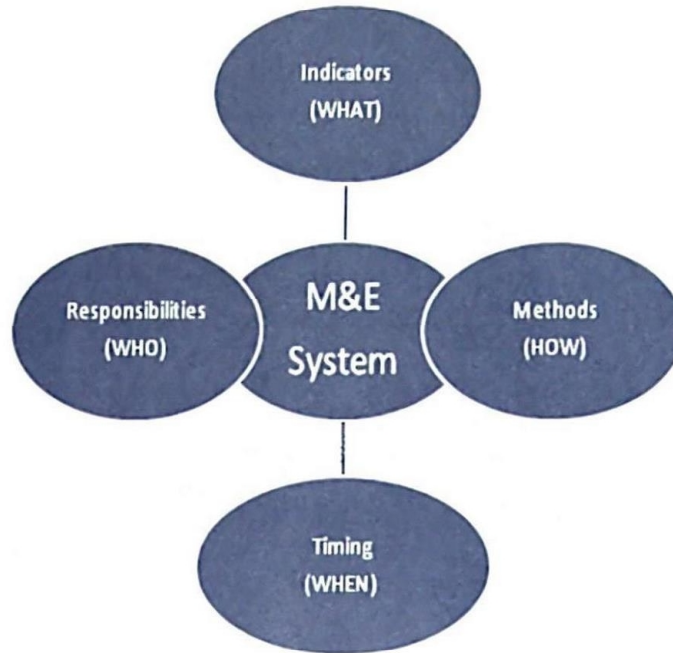


Fig.1: Monitoring and Evaluation Components

Conclusion

Behaviour change should become a key target of many government policies across various ministries and parastatals. Main policy areas should focus on behaviour change at the individual, community and political levels, which includes among others the educational sector, social environment, health sector, power and transport sectors. Factors which influence behaviour, for example, Predisposing factors (knowledge, beliefs, attitudes, norms, perceptions), Enabling factors (money, skill, time, facilities, policy) and Reinforcing factors (influence of significant others like parents, husband, friends, employer), should be addressed with through using a holistic approach.

References

- Morris J., Marzano M., Dandy N. and O'Brien L. Sustainable behaviours and behaviour change – setting the scene (Summary Report). The Research Agency of the Forestry Commission, UK. 2012.
- Adejumo AO. Psychology 409: Psycho-biological study of behaviour. Lecture notes, Department of Psychology, Faculty of Social Sciences, University of Ibadan, Nigeria. 2017.
- Green, LW. and Kreuter, MW. Health promotion as a public health strategy for the 1990s. *Annual Review of Public Health* 1990; 11(1), 319-334.
- Tombor I. and Michie S. Methods of Health Behaviour Change. *Health Psychology*. 2017. DOI: 10.1093/acrefore/9780190236557.013.125.
- Nutbeam, D. Health Promotion Glossary (original Health Promotion Glossary). In: *Health Promotion Journal* 1986; 1.1, 113-127.
- World Health Organization (2011): Global status report on noncommunicable diseases 2010. Accessed 03 Decemebr, 2018.
- Kohl HW, Craig CL, Lambert E.V, et al (eds) The pandemic of physical inactivity: global action for public health, *Lancet* 2012; 380: 294-305.
- Adegoke BO and Oyeyemi AL. Physical inactivity in Nigerian young adults: prevalence and socio-demographic correlates. *J Phys Act Health* 2011 ; 8(8):1135-42. [Online] Available from <http://www.ncbi.nlm.nih.gov/pubmed/22039132> accessed 03 December, 2018.
- World Health Organisation (2016). <http://www.who.int/countries/nga/en/>. Accessed 24 May, 2018.
- Kumar S. and Preetha GS. Health promotion: An effective tool for global health. *Indian J Community Med*. 2012 Jan-Mar; 37(1): 5-12. doi: [10.4103/0970-0218.94009].

11. Michie S., Maartje Stralen MMV and West R. The behaviour change wheel: A new method for characterising and designing behaviour change interventions. *Implementation Science* 2011; 6:42 <http://www.implementationscience.com/content/6/1/42> (23 April 2011).
12. Transparency International. Corruptions perceptions index 2015. <https://www.transparency.org/cpi2015>. Accessed 25 May, 2018.