

Principles and steps for applying a behavioural perspective to public health

- Most public health challenges have a behavioural component. WHO and its partners can use behavioural sciences to enhance the design and implementation of policies and guidance, programmes, communications, research or capacity building.
- This note outlines high-level principles and processes that can be used for the application of behavioural sciences to health. It is relevant for the development of a holistic behavioural strategy (a set of interventions) or a single behavioural intervention to address a public health challenge.
- The [WHO Technical Advisory Group \(TAG\) on behavioural insights and science for health](#) developed six behavioural insights principles and five steps to support WHO's efforts and those of its partners. The principles describe key concepts that underpin the application of behavioural science and that health professionals are encouraged to think about when applying behavioural science to their work. This is often referred to as adopting a behavioural science 'mindset', 'perspective' or 'lens'.
- The principles and steps developed by the TAG are a living product. They have been informally reviewed by members of WHO's staff across the three levels of the organisation, they are continuously tested and applied in practice on a variety of topics and areas, and they will be periodically updated.

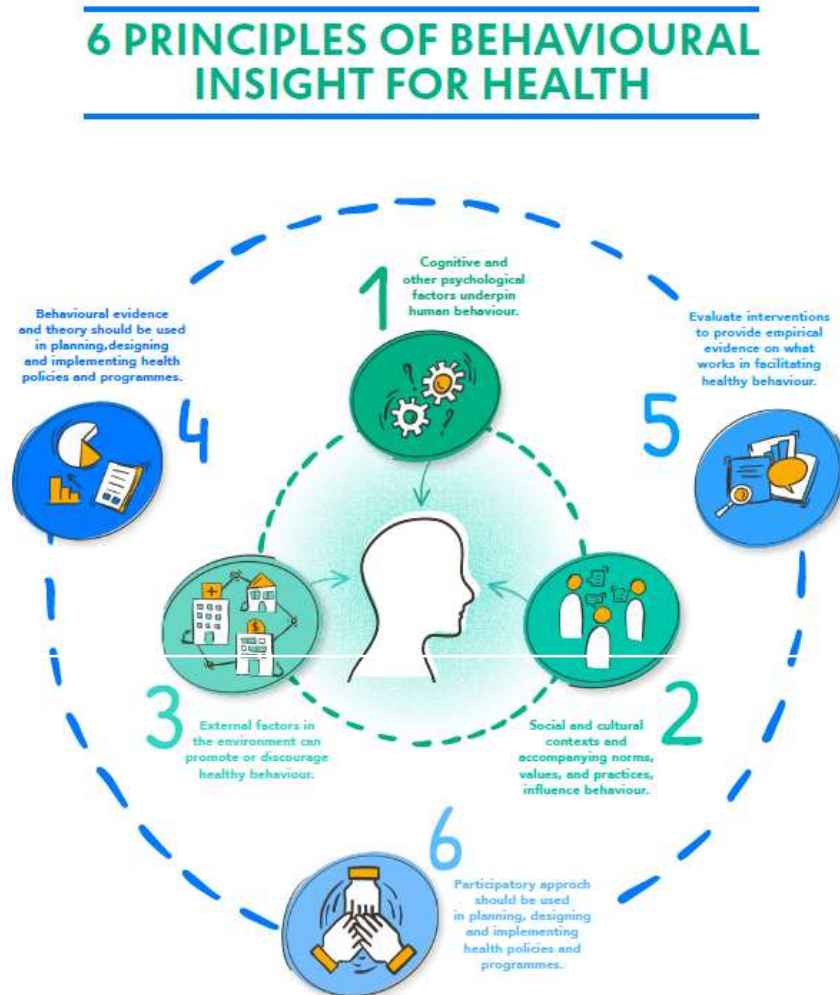
Principles for the adoption of a behavioural science perspective

Approaching public health from a behavioural perspective requires focusing on people and their behaviours in the context in which those behaviours occur. The following six principles (Fig 1) are divided in two types:

Principles one to three help understand behaviours and lay out three different types of influences: cognitive and psychological factors; cultural and social factors; and the environment, including but not limited to the physical. These dimensions interact with each other to shape individual and collective human behaviour and need to be considered together. Gathering evidence on these behavioural influences and their interactions can provide insights on how to intervene to facilitate adoption of behaviours.

Principles four to six define how to gather and harness behavioural evidence and theory to design, implement and evaluate strategies or interventions. Public health strategies and interventions will most likely change a behaviour if they target the exact enablers and barriers that have been found to influence that behaviour. Evaluating strategies and interventions is needed to determine what works and what doesn't, and to guide further refining of the intervention. With a good understanding of the behavioural issues at play, it is important to use a participatory approach to engage with communities who will be affected by the intervention, build their trust in the process, and co-design interventions.

Fig 1. Six principles for the adoption of a behavioural science perspective in public health



PRINCIPLE 1. Cognitive and other psychological factors underpin human behaviour.

A rich body of evidence in the behavioural and social sciences provides insights into how people think and make decisions, particularly with respect to health. These psychological factors include not only cognition, but also motivation and emotion. The underlying theories and models of decision-making have shown that cognitive biases and heuristics generally influence human behaviour in systematic ways. In addition, an individual’s knowledge and skills can influence their capability to adopt behaviours. Whilst knowledge is often required for behaviour change, it is often not enough to change behaviours on their own¹. It is useful to distinguish between conscious, reflective processes (e.g. intention) and nonconscious, automatic processes (e.g. emotion). Understanding these generic psychological influences on behaviour can provide insights on how to intervene to promote better outcomes.

PRINCIPLE 2. Social and cultural contexts, and accompanying norms, values, and practices, influence behaviour.

An individual's behaviours are produced within social and cultural contexts. For example, social norms and constructs, practices, local identity and values, social support systems and cultural commitments influence behaviour. To understand the social context in which the behaviours are taking place, evidence is needed. Insights generated using community-driven strategies for collective data, and through careful assessment of local circumstances, can provide a nuanced understanding of the social and cultural context driving people's behaviours.

PRINCIPLE 3. Environmental influences: external factors in the environment can enable or discourage healthy behaviour.

What people eat, whether they get vaccinated, whether they quit smoking, and whether they avoid risks: such actions and activities are influenced by the environment in which an individual resides and makes decisions. These external factors include systems and structures (physical, economic, political), regulations and policies, access to spaces and services, and availability of resources. Environments can enable or limit opportunities for behaviours to happen, sometimes in unexpected ways or with unintended consequences. Evidence should be collected to better understand how environments act as barriers or enablers to healthy behaviours. The resulting insights can be used to design or re-design aspects of the environment to enable healthy behaviours.

PRINCIPLE 4. Behavioural evidence and theory should be used in planning, designing and implementing health policies and programmes.

Gathering evidence and data on the three types of influences on human behaviour can provide a better understanding of the behavioural issue – e.g., *why* people aren't accessing health services. Behavioural evidence can also point to which key behaviours to facilitate, who are the actors involved in the process, and what are the barriers and enablers to adoption of healthy behaviours. Strategies and interventions will be most likely to change a behaviour if they target the exact drivers and barriers that have been found to influence a specific behaviour. Strategies are likely to have most impact when delivering a mix of interventions that can work synergistically together such as programmes/services, communications and marketing, financial measures, guidelines, legislative and regulatory mechanisms.

PRINCIPLE 5. Evaluate strategies and interventions to provide empirical evidence on what works in facilitating healthy behaviour.

Finding out what works best to facilitate the adoption of behaviours requires proportionate time and resources to test, learn and adapt during the intervention cycle. Whenever possible, strategies and interventions should be evaluated in order to determine what works and what does not work, how well they work, and why (the mechanisms underlying change). Given the influences of social, cultural and other environmental factors on behaviour, it is important to empirically evaluate strategies and interventions in specific contexts. Evaluation at a smaller scale (e.g., pilot projects) can generate useful data and insights to refine and contextualise a strategy or intervention for greater health impact before scaling up. Evaluation should be documented and shared to build the evidence-base.

PRINCIPLE 6. Participatory approaches should be used in planning, designing and implementing health policies and programmes.

It is important for behavioural and social scientists to use a participatory approach to co-design tailored strategies and interventions with communities who will be affected; this must include outreach to marginalised populations.

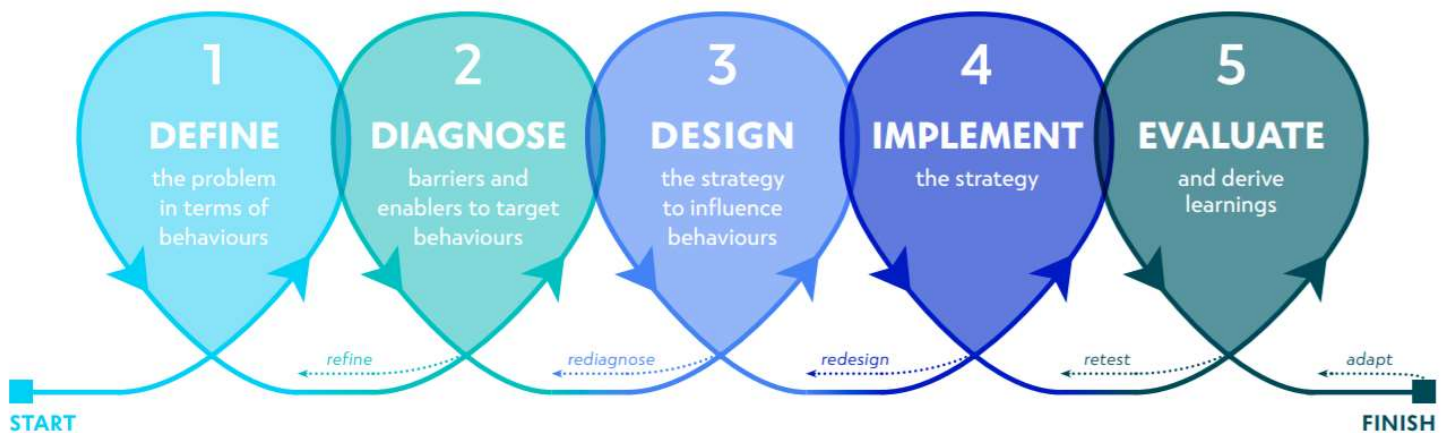
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Engaging with relevant stakeholders in communities (e.g., citizens, policymakers, healthcare providers) from an early stage of the design process builds trust in communities, which is an important element in enabling healthy behaviours and subsequent, more equitable health and well-being outcomes.

5 Steps for the application of behavioural science

The WHO TAG identified five steps that should be followed to tackle a public health problem from a behavioural perspective (Fig 2).

Many public health problems are complex. Complex problems require a ‘systems thinking’ approach to understand the problem and to set boundaries around it so that it can be collaboratively addressed. Once there is agreement on the definition of the problem, the people involved and their behaviours can be **defined** so that the influences on those behaviours in terms of barriers and drivers can be **diagnosed**. The strategies and interventions that can change those behaviours can then be **designed**. These should target the specific influences on behaviours and aim at enabling people to adopt behaviours that result in improved health outcomes. The **implementation** of enhanced or innovative strategies and interventions should be **evaluated** and resources assigned to further research in the topic and to achieve more effective and equitable outcomes.

Fig 2. Steps for the application of behavioural science



1. **Define** the problem in terms of behaviours

- Confirm that the problem has a behavioural component and which behaviour(s) must be tackled to improve the desired health outcome.
- Identify target behaviour(s) (i.e., who needs to do what, when, where, how). Try to be as specific as possible about behaviours, whilst recognising that behaviours are interconnected and are likely to be part of a combination or sequence of behaviours.

2. **Diagnose** barriers and enablers to the target behaviours

- Understand behaviour in context, and what needs to change for the target behaviours to occur.

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- Identify the barriers and enablers to the relevant people adopting a desired behaviour, ceasing an undesired behaviour, or changing (e.g., frequency, duration, setting of) a behaviour.
3. **Design** the strategy and/or intervention to influence behaviours
 - Use data and insights that provide an understanding of context to inform the design of the strategy and/or intervention to influence behaviour.
 - Identify relevant intervention types and policy options that could bring about behaviour change.
 4. **Implement** the strategy and/or intervention
 5. **Evaluate** and derive learnings
 - Findings will allow us to conclude whether the strategy was feasible and acceptable, whether it was delivered as intended, and whether it had an effect on the target behaviour.
 - Documentation of learnings will inform the scale-up of the strategy and/or its transferability to other contexts.

Behavioural data and evidence

In order to maximise effectiveness, it is essential to use behavioural data, evidence and theory in diagnosing, designing, implementing and evaluating health policies and programmes. Existing evidence should always be reviewed and synthesised where possible as it is often efficient and effective to build on existing knowledge.

Transferability of evidence to the current context should always be carefully considered. When relevant data and evidence are not available, new data should be gathered and analysed. Data collection should use resources proportionately and with the most rigorous methodology to produce the evidence that the resources will allow.

Behavioural science frameworks can help public health professionals apply theory where there are gaps in the evidence base (such as for new and emerging diseases). They can also help to structure the data gathering, analysing and interpretation process. Lastly, frameworks can enable communication across countries and sectors.

Recognizing the complexity of WHO's work across functions and levels, and that no single framework can be used to meet the needs at every step, these frameworks are not discussed here; the TAG plans to produce a new note specifically on frameworks. Public health professionals will optimise health policies and programmes by drawing on as much behavioural evidence and theory as possible and by applying the most rigorous methods within their resources. Types of behavioural evidence include:

- 1) Empirical studies, quantitative and qualitative
- 2) Systematic reviews and meta-analyses that synthesize evidence from individual studies
- 3) Local evidence:
 - Routine data collected by organizations
 - Documents and protocols
 - Talking to people formally/informally: interviews, focus groups, ethnographic work
 - Local surveys/questionnaires
 - Local observational data
- 4) Non-peer-reviewed literature

Methodology

WHO's behavioural insights unit coordinated the work of the TAG in three phases to develop this initial informal guidance. The objective is to support WHO experts and partners to apply behavioural science.

Phase One

Content was developed by two different working groups of the WHO Technical Advisory Group on Behavioural Insights and Sciences for Health. The Group is composed of experts representing a broad range of disciplines relevant to behavioural insights and sciences. The group also brings together extensive experience in designing and implementing national health policies and programmes informed by behavioural insights and sciences; in evaluating the impact of behaviourally informed public health initiatives in low- and middle-income countries; and in setting up or running behavioural insights units in organizations.

The first working group met between August and September 2020 to draft and agree on text that could guide the work of WHO in the field of behavioural science. Following several question-based discussions, the first working group developed a set of principles intended as brief statements to capture major concepts that underpin behavioural science in practice, and which public health professionals would need to think about in almost all applications of behavioural science. The objective of the principles is to guide the application of behavioural science and enable the concise communication of a WHO behavioural science approach.

The second working group met between October and November 2020 to identify frameworks, tools and methods that would help WHO staff and partners apply behavioural insights and sciences in their work. Building on the principles, they agreed on the steps for the application of behavioural science above and recommended the use of existing frameworks/tools and methods to apply behavioural science rather than developing new methods at that stage. They also developed additional guiding materials that are not covered above but will be included in subsequent notes and publications focusing more on methodology.

Phase Two

After the working groups developed their initial draft principles, they were reviewed by three focus groups of 6-8 WHO staff members each to test their clarity, usefulness and relevance. Participants were invited from a broad range of roles, teams and geographies across the organisation. While all had some interest in behavioural insights, there was a wide range of expertise, with most participants bringing a limited or moderate understanding of behavioural insights and sciences. Detailed minutes and recordings of each focus group were taken and summarised; commentary was created from which amendments were made to the principles in order to enhance their clarity, usefulness and relevance.

Phase Three

Lastly, the principles and steps were used, further tested and refined by the WHO HQ Behavioural Insights team from December 2020 onward, to apply them in practice in the delivery of work by Member states and WHO across functions, health topics and levels. They were used to communicate an approach to behavioural science in both oral and written formats with WHO colleagues and external partners from across the world in roles that include implementation, development of guidance, communications, policy and research.

For more information, please contact behavioural.insights@who.int.