Prioritisation of Informed Health Choices Key Concepts

Background

The Informed Health Choices (IHC) Key Concepts are principles for thinking critically about healthcare claims and deciding what to do.[1] The Key Concepts provide a framework for designing curricula, learning and teaching resources, and evaluation tools.

Objective

To prioritise which of the 49 IHC Key Concepts to include in IHC resources for lower-secondary schools in East Africa.

Methods

We used an iterative, structured consensus process built on Wiggins' and McTighe's "backward design" approach,[2] the Nominal Group Technique consensus process,[3] and Feinstein's criteria for sensibility.[4] Ten judges from Kenya, Rwanda, and Uganda prioritised the IHC Key Concepts to be included in the IHC secondary school resources. Three were curriculum specialists or teachers, one was a health promotion officer, and the other six were health researchers who were members of the project team and were familiar with the IHC Key Concepts. Before independently assessing the 49 concepts (Table A1.1),[5] they agreed on the central ideas underlying what students should learn, the core tasks that students should be able to perform, and six criteria that were used:

- How important is the concept for understanding the central ideas?
- How important is the concept for enabling students to perform the core tasks?
- Will students be able to understand the concept?
- Is the concept frequently not understood or considered?
- What is the potential impact of not understanding or considering the concept?
- Are students likely to be able to apply the concept in their daily lives?

After they reached a consensus, we collected informal feedback from teacher and student networks and advisory groups in each country, from our international advisory group, and from other members of our research team.[6]

A second panel assessed the concepts prioritized by the first panel using the same six criteria, after being provided with a summary of the feedback. The second panel included nine judges, seven of whom were members of the first panel. Two were curriculum specialists, one was a teacher, one was an education researcher, and the other five were members of the project team. Three other curriculum specialists participated in the discussions but did not complete independent assessments of the concepts.

Results

The first panel prioritized 29 of the 49 concepts (Table A1.1). After reviewing feedback on the first consensus, the second panel assessed 27 concepts and prioritised 17 of those. The original plan was to develop two sets of resources to be used during two school terms. However, due to the Covid-19 pandemic and school closures, it was only possible to produce one set of resources for a single school term. After collecting feedback on prototypes of the resources, the second consensus panel agreed on the nine concepts included in the IHC secondary school resources.

Table A1.1. Prioritised IHC concepts

		Consensus			
	IHC Key Concepts	**1**	**2a**	**2b**	**Final**
1	**Claims**				
1.1	**It should not be assumed that treatments are safe or effective - or that they are not.**				
1.1a	Treatments can cause harms as well as benefits.	✓	✓	✓	✓
1.1b	Large, dramatic effects are rare.	✓	✓	✓	✓
1.1c	It is rarely possible to be certain about the effects of treatments.	✓	✓		
1.2	**Seemingly logical assumptions are not a sufficient basis for claims.**				
1.2a	Treatment may not be needed.	✓	✓		
1.2b	Beliefs alone about how treatments work are not reliable predictors of the presence or size of effects.	✓	✓	✓	
1.2c	Assumptions that fair comparisons of treatments in research are not applicable in practice can be misleading.				
1.2d	An outcome may be associated with a treatment but not caused by it.	✓	✓	✓	
1.2e	More data is not necessarily better data.				
1.2f	Identifying effects of treatments depends on making comparisons.	✓	✓	✓	✓
1.2g	The results of one study considered in isolation can be misleading.	✓	✓		
1.2h	Widely used treatments or those that have been used for decades are not necessarily beneficial or safe.	✓	✓	✓	✓
1.2i	Treatments that are new or technologically impressive may not be better than available alternatives.	✓	✓	✓	✓
1.2j	Increasing the amount of a treatment does not necessarily increase its benefits and may cause harm.	✓	✓	✓	
1.2k	Earlier detection of 'disease' is not necessarily better.				
1.2l	It is rarely possible to know in advance who will benefit, who will not, and who will be harmed by using a treatment.				
1.3	**Trust in a source alone is not a sufficient basis for believing a claim.**				
1.3a	Your existing beliefs may be wrong.	✓	✓	✓	
1.3b	Competing interests may result in misleading claims.	✓	✓	✓	
1.3c	Personal experiences or anecdotes alone are an unreliable basis for most claims.	✓	✓	✓	✓
1.3d	Opinions alone are not a reliable basis for claims.	✓	✓	✓	
1.3e	Peer review and publication by a journal do not guarantee that comparisons have been fair.				

	IHC Key Concepts	Consensus 1	2a	2b	Final
2	**Comparison**				
2.1	**Comparisons of treatments should be fair.**				
2.1a	Comparison groups should be as similar as possible.	✓	✓	✓	✓
2.1b	Indirect comparisons of treatments across different studies can be misleading.				
2.1c	The people being compared should be cared for similarly apart from the treatments being studied.	✓	✓	✓	
2.1d	If possible, people should not know which of the treatments being compared they are receiving.	✓			
2.1e	Outcomes should be assessed in the same way in all the groups being compared.	✓	✓	✓	
2.1f	Outcomes should be assessed using methods that have been shown to be reliable.				
2.1g	It is important to assess outcomes in all (or nearly all) the people in a study.				
2.1h	People's outcomes should be counted in the group to which they were allocated.				
2.2	**Syntheses of studies need to be reliable.**				
2.2a	Reviews of studies comparing treatments should use systematic methods.				
2.2b	Failure to consider unpublished results of fair comparisons may result in estimates of effects that are misleading.				
2.2c	Treatment claims based on models may be sensitive to underlying assumptions.				
2.3	**Descriptions should clearly reflect the size of effects and the risk of being misled by the play of chance.**				
2.3a	Verbal descriptions of the size of effects alone can be misleading.	✓	✓		
2.3b	Relative effects of treatments alone can be misleading.	✓	✓		
2.3c	Average differences between treatments can be misleading.	✓			
2.3d	Small studies may be misleading.	✓	✓		✓
2.3e	Results for a selected group of people within a study can be misleading.				
2.3f	The use of p-values may be misleading; confidence intervals are more informative.				
2.3g	Deeming results to be "statistically significant" or "nonsignificant" can be misleading.				
2.3h	Lack of evidence of a difference is not the same as evidence of "no difference".				
3	**Choices**				
3.1	**Problems and options should be clear.**				
3.1a	Be clear about what the problem or goal is and what the options are.	✓	✓	✓	
3.2	**Evidence should be relevant.**				
3.2a	Attention should focus on all important effects of treatments, and not surrogate outcomes.				
3.2b	Fair comparisons of treatments in animals or highly selected groups of people may not be relevant.	✓	✓		
3.2c	The treatments compared should be similar to those of interest.				
3.2d	There should not be important differences between the circumstances in which the treatments were compared and those of interest.				

	IHC Key Concepts	Consensus 1	2a	2b	Final
3.3	**Expected advantages should outweigh expected disadvantages.**				
3.3a	Weigh the benefits and savings against the harms and costs of acting or not.	✓	✓	✓	✓
3.3b	Consider the baseline risk or the severity of the symptoms when estimating the size of expected effects.	✓	✓		
3.3c	Consider how important each advantage and disadvantage is when weighing the pros and cons.	✓	✓		
3.3d	Consider how certain you can be about each advantage and disadvantage.	✓	✓		
3.3e	Important uncertainties about the effects of treatments should be addressed in further fair comparisons.				
	Number of concepts	*29*	*27*	*17*	*9*

** ✓= Included*

1 = First consensus

2a = Concepts assessed by the second consensus panel. Two concepts prioritised by the first panel (2.1d and 2.3c) were not considered after feedback from teachers, students, curriculum developers, and other members of the research team.

2b = Concepts prioritised by the second consensus panel

Final = Prioritised concepts after collecting feedback on prototypes of the resources and agreed on by the second consensus panel. One concept that was not initially prioritised by the second consensus panel (2.3d) was included as one of the nine IHC Key Concepts included in the secondary school resources.

References

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