

WHAT IS DIFFUSION OF INNOVATIONS?

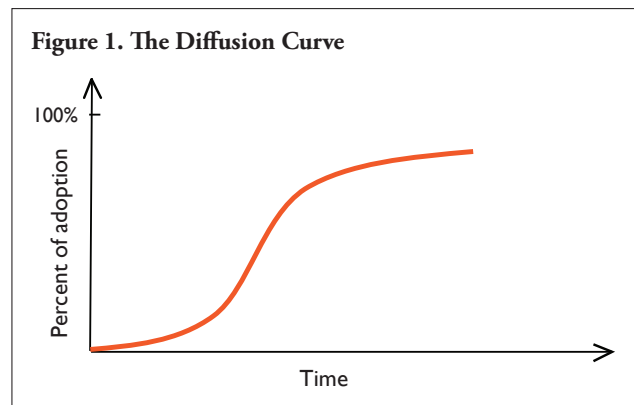
Diffusion of Innovations is a research model that describes how a new idea, product or positive health behavior spreads through a community or social structure. The model identifies several factors that influence how quickly an idea or behavior is adopted. The adoption of a new idea (or diffusion of an innovation) depends on characteristics of the innovation, communication channels, time and the social system. This model highlights the uncertainties associated with new behaviors and helps public health program implementers consider ways to resolve these uncertainties.

Figure 1 represents the diffusion S-curve. The curve illustrates how people are initially slow to adopt new behaviors, but as the behavior becomes better known and accepted, more people quickly start to practice it. Eventually the behavior becomes commonplace with fewer new adopters. The model's founder, Everett Rogers, considered this S-curve the best depiction of how innovations are diffused through a social system.

A closer look at the diffusion curve shows how the different characteristics of the model (innovation, channel, time and social system) can influence the path to adoption. The horizontal x-axis represents the time it takes to adopt an innovation, while the vertical y-axis is the percentage of people in a community who have adopted the innovation. The more time passes, the more people are likely to adopt an innovation in a close-knit community.

At the outset, fewer people are trusting of the innovation and the percentage of adoption is low. More popular innovations will have steeper curves, while those innovations that are slow to adopt will have flatter curves.

Communication channels can also influence how quickly an idea is shared in a community. Effective communication can help an innovation become more popular, also making a steeper curve. Implementers can track the progress of their social and behavior change communication campaigns and other interventions by creating similar graphs as results of the program reach are evaluated. Ideally, program implementers are seeking to make the graph narrower and taller – reaching more people, quickly.



WHEN SHOULD THE DIFFUSION OF INNOVATIONS MODEL BE USED?

Consider using the Diffusion of Innovations model for interventions that have a limited amount of time to make an impact on entire communities. Diffusion of Innovations approaches work best when applied to issues that can be influenced by prominent members of society or spread through traditional methods of communication.

WHAT SHOULD IMPLEMENTERS KNOW?

The characteristics of an innovation or health behavior will influence how rapidly it can be adopted. Some innovations quickly become popular, while others require more explanation and practice before they are popularized. **Figure 2** describes the main characteristics of an innovation, as well as their meaning for program implementation. As people become more familiar with an innovation, they are more likely to adopt it.

Figure 2. Characteristics of an Innovation

Complexity	Compatibility	Observability	Trialability
How simple?	Does it work for me?	Can I see it?	Can I try it?
These questions can be answered in social advertising and through community/radio discussions.		Even if a person has never seen something, hearing a friend or a community leader speak positively about it could encourage them to use it.	A person might never be able to try something, but seeing someone else go through the experience on TV or in a community drama can have a similar effect.

Communication helps answer questions about an innovation, builds familiarity with it and increases its appeal. Consider the most effective methods of communication for a particular community – whether it is radio, community meetings, word of mouth, or a combination of the three.

Opinion/community leaders are particularly important to increasing the appeal of the innovation and encouraging individuals to consider the innovation. As trusted members of the community, they can serve as guides for adopting a particular behavior. They can also prevent diffusion of an innovation if they reject it. Learn about the opinion leaders in a particular community and focus on educating them about the innovation. Their support might be the quickest approach to introducing change.

Societal structure also affects how individuals adopt an intervention. Determine whether the community is open to integrating innovations, if women and men talk informally about health issues, or if there are community gatherings where people come together to exchange and discuss information. Understanding the community environment can also help implementers identify opinion leaders and select the best channels of communication.

Every community will have early adopters – those eager to try the innovation – and later adopters – those not readily convinced. Finding ways to connect early adopters to the rest of the community can promote diffusion.

South Africa’s Brothers for Life Tackles Men’s Involvement in HIV Prevention

Launched in 2009, Brothers for Life (BFL) is an ongoing South African health communication program that promotes HIV testing, voluntary medical male circumcision (VMMC), male involvement in the prevention of mother-to-child transmission of HIV (PMTCT) and prevention of gender-based violence. BFL uses a variety of innovative approaches to diffuse the principles of positive behavior among South African males.

For VMMC, BFL used the Diffusion of Innovations principles of Observability and Trialability by interviewing men who underwent the VMMC procedure and publicizing the interviews through a national campaign using TV and radio. Through storytelling, BFL connected other men to the experiences of their peers and encouraged them to make a decision to go forward with the procedure. In support of these activities, BFL also created an SMS number that men and women could text to get answers to their questions about VMMC and directions to the nearest clinic. BFL successfully increased knowledge of VMMC from 8% in 2009 to 47% in 2012. Statistical data also shows BFL activities led to an increase in VMMC uptake.

In another example, BFL used the same principles to promote positive HIV testing behavior by creating 1,000 Twitter accounts for World AIDS Day 2011 and recruiting HIV-positive volunteers to tweet about HIV stigma and promote HIV testing using the hashtag #HIVarmy. Within hours, the #HIVarmy hashtag was “trending” (i.e., a Twitter hashtag tagged at a greater rate than other tags) in South Africa and then globally. Local celebrities picked up the hashtag and joined the conversation. At midnight all 1,000 accounts were terminated with the word “deceased” displayed in the avatar. The last tweet warned South Africans that 1,000 of their fellow citizens needlessly die from AIDS-related causes daily. The innovative Twitter campaign created a virtual social network, recruited opinion leaders and used a new communication channel to achieve diffusion of HIV testing and awareness messages.

REFERENCES

- Barker, K. (2004) Diffusion of innovations: A world tour. *Journal of Communication*, 9:131–137
- Brothers for Life: #HIVarmy case study: <http://worldsbestcasestudies.com/brothers-for-life-hivarmy-case-study/>
- Dearing, J. (2009) Applying Diffusion of Innovation Theory to Intervention Development. *Research in Social Work Practice*, 19:503-518
- Rogers, E.M. (2003). *Diffusion of Innovations* (5th ed.). New York: Free Press