

# The effectiveness of public health interventions



## **Introduction**

The health of the whole population is a very important issue. Conditions which are likely to affect the whole population or large sections of the population are considered to be public health issues and are the subject of specific healthcare promotions and interventions. These can take a range of forms; those aimed at raising awareness of symptoms or lifestyle factors that are implicated in developing a particular condition; management of health conditions to improve quality of life and/or longevity or recognition of symptoms to obtain early treatment. Public health interventions are developed to address identified public health issues (National Institute for Health and Care Excellence, 2015). Once these are put in place, it is important to be able to assess the impact of the interventions and their effectiveness in respect of the present situation and also to increase the knowledge base for development of further interventions in the future (Brownson, et al., 2010). This essay will consider the ways in which the effectiveness of public health interventions can be determined.

## **Discussion**

One of the main factors that needs to be considered in public health interventions is cost-effectiveness (The King's Fund, 2014). The NHS has increasing demands on its services and so, when developing new interventions or reviewing those already in place, cost effectiveness is one of the most important issues. A further aspect of the effectiveness of public health interventions is the extent to which they have demonstrably achieved the aims set for the intervention (Scutchfield & Keck, 2003). These two areas will now be considered in greater detail.

There is a finite budget available to the NHS to provide healthcare and this has to be utilised in the most efficient way. The economic constraints that have been in place for some time have created an even greater need for financial efficiency. One way that this can be achieved is through reducing the numbers of people who are suffering from conditions which are considered to be avoidable. Conditions such as diabetes and obesity for example, are considered to be largely avoidable by people changing lifestyle habits to improve their health. Thus a range of public health interventions have been directed to focus on these types of issues in order to prevent people from becoming ill as this would represent a substantial saving in costs of treatment for subsequent illnesses. It would also provide benefit to the public in that people would lead longer, healthier lives. However, preventative interventions present difficulties in measuring their effectiveness. A reduction in the numbers of people developing diabetes, for instance, may be attributable to a public health intervention or it may be the result of one or more other factors. The individuals measured may not have developed the condition anyway and so it cannot be proven that the intervention itself was solely responsible for them remaining well. As it can be difficult to accurately measure effectiveness of outcomes, the cost-effectiveness is also difficult to assess. Historically, preventative healthcare promotion has been a problematic area due to the difficulties in establishing effectiveness and this made obtaining funding for such activities particularly challenging. However, the increasing demand for services has meant that there has been a shift in perspective and a greater focus on prevention. Thus, the means of evaluating public health interventions in this area has become important. Although the financial implications cannot be the sole

<https://assignbuster.com/the-effectiveness-of-public-health-interventions/>

driver for health promotion, financial issues are of necessity a major factor as there are obligations on the NHS to produce evidence that their funding has been properly and effectively spent.

The effectiveness of health promotions from the perspective of health improvement of the population should be the primary motivation of interventions rather than cost. In order to improve public health, there are a range of options for interventions. The impact of health interventions was described by Frieden, (2010) as being in the form of a five-tier pyramid with the bottom tier being the most effective as it reaches the largest sector of the population and has the greatest potential to improve the social/economic determinants of health. The higher tiers of the pyramid relate to areas where the individual is helped to make healthy choices. Topics that are within the bottom tier of the pyramid include the improvements in health brought about by changing lifestyle habits such as smoking. Wide-scale promotions and interventions have been in place for many years and this has reduced the numbers of people who already smoke together with encouraging people not to begin smoking. As a result, the risk factors of health issues such as heart conditions has been reduced. Whilst this may not completely prevent some people from developing such conditions in terms of public health, which takes the wider perspective, a higher proportion of people will be at a lower risk. Thus, the effectiveness of interventions in this case can be measured by the proportion of the population who currently smoke, who have given up smoking and who have started smoking by comparison to previous years records (Durkin, et al., 2012). The numbers of people coming forward for help through smoking cessation provisions offered by their GPs

can also be measured, together with the effectiveness of the those interventions in helping people to achieve their goal to stop smoking.

The longstanding interventions to reduce the numbers of people with HIV/AIDS also fell within the same category of public health interventions (as just described in respect of smoking) once it was clear that it was a potential risk to a large section of the population. In this instance, there was a large amount of public health promotional activity when the issue was first known in the 1980's but this has largely subsided currently with few if any national high profile promotions/interventions (Bertozzi, et al., 2006). However, the risk has not been eradicated and there has been an increase in older people developing the condition (AVERT, 2015). This may be due to them not considering they are at risk or they may not have been targeted by the original campaigns which had a greater focus on the homosexual communities, needle using drug addicts and sexually active, younger adults. Married couples were not then considered to be the primary target audience for such campaigns. This demonstrates that there is a need for on-going interventions, particularly in terms of public awareness, to ensure that there is a consistent and improving impact (AVERT, 2015). Unless a health risk has been eradicated, there is likely to be a need for continuing interventions to maintain public knowledge levels. The way in which HIV/AIDS and smoking are directed at the wider population are examples of Frieden's bottom sections of the pyramid.

When interventions are applied in the top levels of Frieden's pyramid they address individuals more directly, rather than the whole population (2010). Thus, it could be argued that such interventions would overall, have a

<https://assignbuster.com/the-effectiveness-of-public-health-interventions/>

greater impact as any public changes need to involve each individual changing. Unless each person is reached by the intervention and perceives that it is a valuable change for them, publicly directly interventions will have reduced effectiveness. National interventions will of necessity be broadly based and they will, therefore, not reach all those people to whom it is aimed as they may feel that it does not apply to them. Thus, the use of interventions that are more specifically targeted to individuals can take into account their socio-economic status and other factors to make the interventions more easily seen to be applicable to them (Frieden, 2010 ).

A different view of public health interventions considers the situation for people with terminal or long term conditions. Many of the interventions focus heavily on the medical model and do not take into account the impact on the patient or how they would prefer to be cared for. The medical view of what constitutes good health may be considered to be a more laboratory based, theoretical view that does not necessarily reflect the lived experience of individuals (Higgs, et al., 2005). Physical incapacity may not impact badly on an individual who has found ways to live a fulfilling life whilst someone who is considered fit and well may not consider that they have good quality of life (Asadi-Lari, et al., 2004). Therefore, the impact of interventions on the public also needs to be considered. A medically effective intervention may be unpleasant or difficult for the patient to endure and thus, viewed as being less effective. Furthermore, if the intervention is too unpleasant the patient may fail to comply and thus, also not obtain the level of effectiveness that the medical model would suggest it should (Asadi-Lari, et al., 2004).

One area of public health that has proved to be somewhat controversial in recent years is that of immunisation. The possible links between the MMR vaccine and autism, for instance, has impacted heavily on the numbers of people having their children immunised (BMJ, 2013). Vaccination is an important branch of public health and relies upon sufficient people being immunised against diseases so that should isolated cases occur the disease will not spread. Many parents today will be unaware of the health implications of illnesses such as German measles and mumps as vaccination has made cases rare. The rarity of the cases has also led to the incorrect belief that these illnesses have been eradicated. Therefore, in this instance the effectiveness of the intervention has been varied by the influence of the media reports or adverse outcomes. The fear that was generated has been difficult to overcome and this has resulted in a loss of faith in the process. This then results in reduced effectiveness of the intervention. However, it can prove very difficult to restore public support following situation such as this that have continued for a long time. The impact can be measured in both the numbers of people coming forward to have their children immunised and in the numbers of cases of the various illnesses that occur each year. The current statistics, however, do suggest that the levels of immunisation with MMR has now been restored to an appropriate level (NHS, 2013).

The provision of the 'flu vaccine is another instance where public health interventions may have varying effectiveness. The actual effectiveness of a 'good' vaccine is not considered to be 100% when the correct formula has been provided. In 2014, however, the vaccine was not for the actual strain of

' flu that occurred and so there was little protection provided (Public Health England, 2015). As a result, it is likely that there will be a downturn in the numbers of people who will come forward to receive the ' flu vaccination this year as the value may be perceived to be doubtful. This also demonstrates the need to provide the public with correct information so that they are aware of the potential effectiveness of the intervention. So in the case of ' flu, if the vaccine has a 60% chance of preventing the illness this should perhaps be specifically stated. There may be a level at which the majority of people feel that it is not worth having the vaccination. If, hypothetically, an effectiveness of less than 30% was considered by the majority of people to be so low that it was not worth having the vaccination, there could be few people immunised and a major epidemic could follow. Therefore, it is important that the information provided is correct and that the intervention itself is seen to be of sufficient value to the individual to warrant them making that choice to take advantage of what is offered (NHS, 2015).

## **Conclusion**

This essay has asserted that the effectiveness of public health interventions can be viewed from two main perspectives: the cost effectiveness of the provision and the impact on the target audience. Whilst there are considerable pressures in the NHS financially, this should not be the primary consideration in respect of public health. The aim of public health interventions is to improve the health and well-being of the population as a whole and uses a wide range of methods to achieve this. Some provisions are aimed at the whole population and others are designed for the individual or smaller target groups. For these to be effective, they need to reach the



target audience and have meaning for them so that they will be encouraged to take the required action. Continuous changes in the provision may also be needed to ensure that long term issues remain in the public awareness.

### **Bibliography**

Asadi-Lari, M., Tamburini, M. & Gray, D., 2004. Patients' needs, satisfaction, and health related quality of life: Towards a comprehensive model. *Health and Quality of Life Outcomes* , 2(32).

AVERT, 2015. HIV/AIDS Statistics 2012. [Online] Available at: <http://www.avert.org/hiv-aids-uk.htm>[Accessed 28 September 2015].

Bertozi, S.; Padian, N. S.; Wegbreit, J.; DeMaria, L. M.; Feldman, B.; Gayle, H.; Gold, J.; Grant, R.; Isbell, M. T., 2006. *Disease Control Priorities in Developing Countries*. New York: World Bank.

BMJ, 2013. Measles in the UK: a test of public health competency in a crisis. *BMJ*, 346(f2793).

Brownson, R. C.; Baker, E. A.; Leet, T. L.; Gillespie, K. N.; True, W. R., 2010. *Evidence-Based Public Health*. Oxford: Oxford University Press.

Durkin, S., Brennan, E. & Wakefield, M., 2012. Mass media campaigns to promote smoking cessation among adults: an integrative review. *Tobacco Control*, Volume 21, pp. 127-138.

Frieden, T. R., 2010 . A Framework for Public Health Action: The Health Impact Pyramid. *American Journal of Public Health*, 100(4), p. 590-595.

Higgs, J., Jones, M., Loftus, S. & Christensen, N., 2005. Clinical Reasoning in the Health Professions. New York: Elsevier Health Sciences.

National Institute for Health and Care Excellence, 2015. Methods for the development of NICE public health guidance (third edition). [Online] Available at: <https://www.nice.org.uk/article/pmg4/chapter/1%20introduction>[Accessed 28 September 2015].

uk/article/pmg4/chapter/1%20introduction[Accessed 28 September 2015].

NHS, 2013. NHS Immunisation Statistics, London: NHS.

NHS, 2015. Flu Plan Winter 2015/16. [Online] Available at: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/418038/Flu\\_Plan\\_Winter\\_2015\\_to\\_2016.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/418038/Flu_Plan_Winter_2015_to_2016.pdf)[Accessed 28 September 2015].

Public Health England, 2015. Flu vaccine shows low effectiveness against the main circulating strain seen so far this season. [Online] Available at: <https://www.gov.uk/government/news/flu-vaccine-shows-low-effectiveness-against-the-main-circulating-strain-seen-so-far-this-season>[Accessed 28 September 2015].

Scutchfield, F. & Keck, C., 2003. Principles of Public Health Practice. Clifton Park: Delmar Learning.

The King's Fund, 2014. Making the case for public health interventions. [Online] Available at: [http://www.kingsfund.org.uk/audio-video/public-health-spending-roi?gclid=CM\\_ExbKomcgCFcZuGwodE44Lkg](http://www.kingsfund.org.uk/audio-video/public-health-spending-roi?gclid=CM_ExbKomcgCFcZuGwodE44Lkg)[Accessed 28 September 2015].

<https://assignbuster.com/the-effectiveness-of-public-health-interventions/>