

$$h(t) \approx \sum_{j=1}^J w_j(t)c_j(t) + \sum_{j=1}^J w_j(t)x_j(t)$$

The answer is 42: life, the universe and the Drug Harm Index

The alien-style maths equations which accompany the Home Office's annual Drug Harm Index have left many readers spinning. **Ziggy MacDonald** explains how the government computes the damage caused by drugs to individuals and society

At the heart of the government's ten-year Drug Strategy and the policies enshrined within it is an overarching aim to reduce the harm suffered by individuals, communities and society as a consequence of the use of illegal drugs. This aim is in fact an explicit Public Service Agreement (PSA) target, which is intended to articulate measurable outcomes that can be used to establish the extent to which policies have been successfully delivered.

This explicit target to reduce harm is a significant development. For the first six years of the Drug Strategy the PSA targets were focussed on the progress being made in each of the four delivery strands of the Drug Strategy (young people, treatment, drug-related crime and supply), but lacked an overall assessment of how this contributed to reducing harm overall.

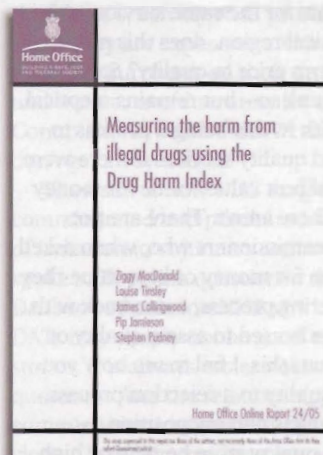
GAUGING IMPACT

During the 2004 Spending Review the Home Office decided to address this and negotiated a PSA target that explicitly focussed on reducing the harm from illegal drugs. It was able to do this because it was in the process of developing an outcome-focussed measurement system that could support this aim. The new PSA target aimed to 'reduce the harm caused by illegal drugs, encompassing the availability of Class A drugs

and drug-related crime, including substantially increasing the number of drug misusing offenders entering treatment through the criminal justice system'. This was to be measured using the Drug Harm Index (DHI), which was published via a detailed technical paper in March 2005¹ and came into effect from April that year. An update was published in March 2006¹¹ and the intention is to provide an update each year until the end of the current Drug Strategy.

Conceptually the DHI is similar to the Deprivation Index¹¹¹ used by the Department for Communities and Local Government to assess which local communities fall into the most deprived quintile in each region. Rather than capturing indicators of social deprivation, the DHI uses available robust national data to capture all the harms that illegal drug use can generate. Currently there are 19 harms captured in the DHI, which fall into three main categories: drug-related domestic and commercial crime (including shoplifting, burglary, theft of or from a vehicle and robbery), community problems (such as community perceptions of drug use and dealing as a local problem) and health harms (including hepatitis B & C, drug-related HIV, overdoses and drug-related deaths).

There are of course many more harms than those captured in the DHI, but they are often not well-measured or available nationally. Rather obvious omissions include the adverse effects of illicit drug use on labour market outcomes (such as absenteeism and unemployment), more community-based harms



(particularly those relating to the 'social fabric') and hidden harms (for example those relating to drug-misusing parents). Whilst these omissions suggest more effort is required around their measurement in order to broaden the range of harm captured in the DHI, as a measure of the broad trend in drug harms the DHI is the most complete measure available.

MECHANISMS

The DHI is technically robust in the way it captures the measurable harms from the use of illegal drugs, but its technical nature makes the results difficult to communicate. At the highest level it can be interpreted in the same way as, say, the consumer price index (CPI): up is bad, down is good. This is the situation we face at the moment – with the latest DHI showing considerable reductions since a peak in 2001 (see graph). This in itself is good news, but, like the CPI, the explanation of what drives this change is somewhat cumbersome (although not as cumbersome as the CPI, which is a weighted index of over 100,000 prices collected from over 150 retail outlets for 12 categories of goods and services).

Underneath the overall level of movement in the DHI, in this case the 16.1 per cent reduction between 2003 and 2004, there is quite a lot going on. A change in any of the 19 harms captured in the DHI can contribute to the overall change in the value of the DHI. However, in constructing the DHI we take account of how important the harms are in terms of the impact they have on individuals and communities. To achieve this we use information on the economic and social costs of the harms, which are then used to weight their level of increase or decrease from year to year. This ensures that a large percentage change in a 'low-value' harm doesn't dominate the overall change in the value of the DHI. The same principle applies to the CPI, where changes in the price of items that take up a large share of a household budget, such as petrol, are given more importance than changes in lower share items like tea.

To illustrate, we know that the economic and social costs to individuals and society that arise from a burglary are considerably higher than the costs associated with the toxic effect of a non-fatal overdose. The impact of a burglary is the combination of fiscal cost (for example criminal justice expenditure) and social costs (such as the direct cost to the victim plus the cost of avoiding being a victim). With a non-fatal overdose the impact tends to be predominately the NHS costs of finished consultant episodes. However, if the individual dies from an overdose the associated costs are much higher than either of these harms, as we take account of the lost lifetime output and human cost resulting from the fatality. This means that if these three harms fell at the same percentage rate, the fall in drug-related deaths would contribute more to the reduction in the overall level of harm than would the fall in burglaries, which in turn would contribute more than the fall in the number of non-fatal overdoses.

It is the combined year-on-year weighted increase and decrease in the harms that determines the overall change in the DHI value. Before 2002 most of the harms were rising, but since then a number have started to fall. When we first published the DHI in

March 2005 it showed that between 2002-2003 the overall harm from illegal drugs was beginning to fall. This was due to reductions in drug-related deaths and cases of drug-related hepatitis C, falling community perceptions of drug use and dealing as a problem, and reductions in the number of drug-related burglaries and thefts of vehicles.



REFLECTION

In the following year (2003 to 2004) the overall harm from illegal drugs continued to fall, but for slightly different reasons. As with the previous year, large falls in drug-related burglaries and vehicle thefts contributed to the overall reduction in the level of harm, but this time reductions in drug-related shoplifting and robbery also feature, with only a small contribution being made by reductions in health harms such as drug-related HIV and hepatitis C). This might well be explained by the early successes of the Drug Interventions Programme (DIP) that commenced in April 2003, although we need to do more work to tease out the causal links and explore the other contributing factors.

Whilst the DHI is undoubtedly a step-change in the way the Drug Strategy is monitored nationally, it is not possible to produce local-area versions of it that could be used to assess partnership performance. This is a limitation but not an obstacle to delivery, as we know from our evidence base that where local areas focus on delivering the outputs that matter – such as the number of people assessed and referred to treatment – the changes in the resultant outcomes will follow and be captured in the DHI. This is why we are confident that the recent reductions in the DHI reflect successful frontline delivery and genuinely reflect a reduction in the amount of harm experienced by individuals, communities and society as a consequence of the use of illegal drugs. •

Ziggy MacDonald works on the Drug Analysis and Research Programme, Crime and Drugs Strategy Directorate

I See www.homeoffice.gov.uk/rds/pdfs05/rdsolr2405.pdf

II See www.homeoffice.gov.uk/rds/pdfs05/rdsolr0806.pdf

III See http://www.odpm.gov.uk/embedded_object.asp?id=1128443

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