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Kevin McConway BBC's "More or Less" and COVID-19

BBC's "More or Less" programming, with its incarnations on BBC Radio 4²⁴, the World BBC's "More or Less" programming, with its incarnations on BBC Radio 4²⁵, the World Service²⁶, can be counted as one of the many changes to life and society resulting from the public health emergency. But what has actually happened?

I'm aware than not everyone is a *More or Less* fan, though I'd recommend that you give it a try if you haven't already done so. Here's a bit of background and history. The BBC bills the Radio 4 version as "Tim Harford explains – and sometimes debunks - the numbers and statistics used in political debate, the news and everyday life." This version has a magazine format – each programme lasts around half an hour and contains around four items. These items can be about pretty well any aspect of numbers. Looking back over the entire output going back several years, a good proportion of the items have been about economic and social statistics, perhaps as discussed by politicians or as used to inform (or misinform) public policy. But there are many other types of item – other fields of statistics, other aspects of economics, and also (less frequently) numbers in physical science, in the arts, and occasionally even stories about pure mathematics. If it has any connection with numbers – and not many things don't – it's been fair game for the programme makers.

The format of the items on the programme does vary. Sometimes the presenter, or another BBC team member, talks alone on the subject. More often there is a discussion between the presenter and another team member. But the most common type of item has been an interview with an outsider who has expertise (or at least something worthwhile to say) about the subject in question.

One feature for many years has been items and queries based on input from 'loyal listeners', as they are always referred to. The programme gets suggestions and questions from listeners on a pretty large scale every week, and while it certainly can't deal with all of these on air, some of its best stories over the years have started out as listener suggestions.

It's important to understand that *More or Less* is part of the BBC's news and current affairs output. This means, amongst other things, that it reacts as rapidly as it can to developing events. Often the planned list of topics for a particular show changed considerably just before broadcast, to incorporate some developing news story that has a numerical aspect. The programme is pre-recorded, and some interviews with outside experts may have been recorded quite a time in advance.

A bit of history. The programme idea was originally developed by its first presenter, the economist Andrew Dilnot, and its first producer, the journalist Michael Blastland. It was piloted in 2003, but was fairly quickly taken up into the regular Radio 4 schedule. In early 2005, the UK's Open University (OU) became involved, and since then the regular Radio 4 series have been produced by the BBC in association with the OU. A personal note: when the OU is involved in producing BBC output, at least one OU academic has to be involved with the production team. I held that role from the start of OU involvement until my

²⁴ https://www.bbc.co.uk/programmes/b006qshd

²⁵ https://www.bbc.co.uk/programmes/b006qshd

²⁶ https://www.bbc.co.uk/programmes/p00msxfl

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retirement from the OU in 2016; this involved considerable discussion with the BBC production team, and occasional appearances on air by me. Others at the OU have since taken over this role, and I still have occasional contact with the team.

In 2007, Dilnot and Blastland both moved on to other positions. Tim Harford, the economic journalist and writer, took over as presenter, and continues in that role up to now. Different producers have led the team since then, but a key figure has been the BBC's Richard Vadon, who has been the programme's Editor for most of that time. Despite certain changes in style between the presenters, the format of the programme has not fundamentally changed, and it is now a very established part of the Radio 4 schedules. It is not on air throughout the year; typically there have been three series a year, each consisting of some six to eight weekly programmes. There are also occasional 'specials' – one-offs or short series linked to an election or referendum or similar (and not co-produced with the OU).

The BBC World Service *More or Less* is somewhat different. It spun off from the Radio 4 series some years after that had begun. The programmes are usually ten minutes and generally include only one item. They are broadcast throughout the year and generally use the same production team and presenter as on the Radio 4 shows. Indeed, many of the items on the World Series show (but not all of them) are shared with the Radio 4 version. They may have been broadcast first on Radio 4 or on the World Service series. Items have to be of international interest to be used on the World Service. That does not apply to all the Radio 4 items, though the Radio 4 programme always took a fairly international view of current affairs. The OU has no formal involvement with the World Series programmes.

Given that *More or Less* always seeks to cover aspects of the news, and given the way that COVID-19has dominated the news since-February 2020, it's hardly surprising that stories involving the new virus have become highly prevalent in the programme. In one way, there *is* a slightly surprising aspect, in that in the past there has not often been a lot of discussion of statistics of health in the shows, at least not in comparison to the coverage of economic, social, political and educational statistics.

But, given that people with a huge range of backgrounds seem to have been attempting to write about statistical models, problems with data sources, epidemiology, supply chain logistics, and other numerical aspects of which they often seem to know rather less than they think they do, it's both inevitable and pleasing that *More or Less* has been casting a generally knowledgeable and suitably critical eye over the current emergency.

I believe the first appearance of COVID-19on Radio 4 *More or Less* was in a programme first broadcast on 31 January, just as the World Health Organization was declaring the outbreak to be a Public Health Emergency of International Concern, and just after the first confirmed cases in the UK. On that date, the disease caused by the virus had not even yet been given the COVID-19name. The programmes lead 10-minute item dealt with what was soon seen as an exaggerated claim from a Harvard public health scientist that R₀, the basic reproduction number, for the new virus was as high as 3.8. Most of the item was an interview with Dr Nathalie MacDermott, a clinical lecturer at King's College London, conducted by one of the programme's regular presenters/producers, Ruth Alexander. Like all good *More or Less* items (which, in my view, is the great majority of them), the important ideas are got across

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clearly, without exaggeration, without panic, but put into clear contexts. However, the 31 January programme then moved onto an item more typical of *More or Less* – investigating a query from a loyal listener about a reported claim that 75% of human emotions are driven by our sense of smell. This is not the most serious thing to consider, but it's been a longstanding tradition of the programme to cover some less serious items like this, and the main presenter Tim Harford does always deal with them with an appealing light touch. There was no more on COVID-19the following week, but on 14 February, in the last programme of that More or Less series. Dr MacDermott was back again, being interviewed by Harford about news that had just emerged that reported numbers of cases and of deaths (in Wuhan) were considerably too low. (Such concerns have continued ever since, internationally as well as in China, one way or another.) This was another 10-minute item, leading the programme - and again it was followed immediately by a much less serious item, in which a loyal listener wanted to know how much jam there is in the world, and whether it would cover Liechtenstein if spread out. (The answer "No, but it would cover Cornwall".) Then, More or Less was off the air until the next series. which Harford announced would start in April. However, there was then a 'Coronavirus special,' first broadcast on 25 March. It's hardly surprising, given the title, as well as that the virus and its consequences were taking up almost all the UK's news space, that this programme consisted entirely of items about the new coronavirus. We heard a substantial interview with Professor David Spiegelhalter about risks from COVID-19-19. This was reassuring to some extent. There was then a discussion about whether young people are really safe from serious illness from the virus - slightly bizarrely, this was billed as another query from a 'loyal listener', who turned out to be Rich Knight, one of the programme's former producers. The item was a discussion between two of the programme's production team, Tim Harford and Ruth Alexander, both of whom do understand the statistical facts and, importantly how to get them across on radio. That was followed by an item on the economic impact in the UK of restrictions on movement and business, and an examination of 'mysterious' aspects of COVID-19statistics in Iran. One aspect of this programme, that pleased but slightly surprised me, was how well Harford's presentation style, which can be very light at times, transferred very well (in my view) to a programme that was entirely about very serious issues.

Since then, the Radio 4 programme has been broadcast weekly (with one exception), though (unusually) not always on the same day each week. And all but one item, so far, has been at least loosely connected to the pandemic. The following is just a brief run-though of the programme content.

31 March. Brief item examining criticism of models produced by Imperial College epidemiologists, in the face of criticisms from the journalist and non-epidemiologist Peter Hitchens. Alexander and Harford discuss gender differences in the effects of the disease on males and female. Interview with Adam Kucharski, an epidemiologist from the London School of Hygiene and Tropical Medicine, who recently published a coincidentally extremely timely book, *The Rules of Contagion*. Kucharski talked about several aspects of epidemiology generally, including some of its history as well as its application to COVID-19-19. How are supermarket supply chains holding up, and what do we know about levels of stockpiling?

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This included an interview with someone involved with the business data company Kantar, on how they measure what's actually being bought in supermarkets and other shops. This demonstrated that things aren't as bad as news reports at the time were indicating.

Discussion with Laura McInerney, *Guardian* education correspondent, on how A-level and GCSE grades will be allocated, given that schools are closed.

8 April. More issues about the death counts related to the virus – a discussion between Harford and one of the programme's producers, Kate Lamble, as well as an interview with statistician Sheila Bird, particularly about the effects of reporting delays. Interview with Dr Marina Adshade of the University of British Columbia about whether it is likely that there will be a boom in births in nine months, given what may have been happening during lockdown. (Dr Adshade thinks not.) Do face masks help prevent the spread of the virus? Ruth Alexander reports, with several brief interviews, that the evidence is unclear, contested, and to some extent contradictory. (That still seems to be the position at the time of writing, though the balance of evidence and opinion has shifted.)

Was crowding in a South London park the previous weekend as bad as a music festival? (Answer: No.) Finally, the only item in the current series so far that appears to have nothing at all to do with COVID-19-19: How many Earth-like planets are in existence? Discussion with Nobel laureate Professor Didier Queloz.

The following week was Easter week and there was no More or Less on Radio 4.

April 22. When will we be past the worst of this wave of infection, given the difficulty of the lockdown? Interview with Dr Jason Oke, medical statistician at the University of Oxford, who has data supporting his team's view that the peak in UK deaths was on 8 April. Comparison of different countries' experience in dealing with the virus – Harford discusses with Ruth Alexander, using question from a loyal listener pointing out that most of the comparisons are not scaled by the populations of the countries being compared. Also an interview with statistical epidemiologist Professor Christl Donnelly, who points out that we should be looking at excess deaths (from all causes).). Another loyal listener asks about an NHS leaflet on the power of social distancing, if (as the leaflet says) each infected person infects on average 2.5 others. He thinks the total figure on the leaflet for infections arising from one initial case is too high. the number is right because it includes everyone at every stage in the process of infection, not just the final stage. On the way Mat gave a good explanation of R, the reproduction number. Investigation of the number of deaths of NHS staff, and (separately) transport workers, to see if these numbers are really much higher than one might expect in comparison with national rates, allowing for age, given that the number of NHS employees is so large. This is a discussion between Harford and the producer Kate Lamble, and the question turns out to be tricky to answer, and difficult to interpret given 'healthy worker' effects. However, it seems much clearer that death rates for London bus drivers are considerably higher than would be expected than it is for health service workers. (There are many fewer bus drivers than there are health service workers.) Finally, an item rather loosely linked to the pandemic. Is it true that birds are singing really

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more. loudly during the lockdown? Dr Sue Anne Zollinger of Manchester Metropolitan University says that bird may actually be singing more quietly, because there's less other noise to compete with; for the same reason, humans might be noticing the birdsong more).

The team also released a special podcast, reviewing the life of the mathematician John Horton Conway, who had died the previous week. Normally such an event might well have been covered on air rather than in a podcast, but I imagine that the importance of, and general interest, in the COVID-19 related items meant that there was no room.

29 April: This began with a discussion of whether doctors from ethnic minority backgrounds have been disproportionately affected by COVID-19- many loyal listeners have been asking. Harford interviews Kavita Puri, a journalist who has made a programme about this for the BBC World Service. The position is complicated because different ethnic groups have very different age profiles, and also a very different geographic and urban/rural distribution. The conclusion is that there is over-representation of people from ethnic minorities amongst COVID-19deaths, though the reasons are complicated and not well understood. One study found that of 18 NHS doctors who had died, 17 were from ethnic minority groups, and though the proportion of doctors with ethnic minority backgrounds in the NHS is high compared to the UK population and to NHS workers generally, it is below 50%. Discussion of whether the UK lockdown was the decisive factor in starting the decrease of COVID-19deaths. Harford had suggested in a previous programme that this might be incorrect, taking into account the typical gap between infection and the death of an infected person. However, an interview with Kit Yates, mathematical biologist from the University of Bath, explains that Harford was wrong, and that we can't really tell, using (among other things) descriptions of different types of average, and of skew distributions. Is the reduction in industrial (and other) activity because of lockdowns having a lasting effect on the environment? Interview with Dr Zeke Hausfather of the University of California, at Berkeley, who reports some noticeable short-term changes but says that the long-term impact on who reports some noticeable short-term changes but says that the long-term impact on climate change is unclear and likely to be very small because of the temporary nature of the lockdowns. Home Secretary Priti Patel's statements that crime has reduced since the lockdown, shoplifting and burglary in particular. This may be unsurprising, given the lockdown, but it turns out that the data showing reductions have not been published in full, and are very awkward to interpret anyway. Finally, for much of the UK lockdown so far, in much of the country anyway, the weather has been relatively warm and sunny. Does this mean that the summer will be wet? Harford interviews Aidan McGivern from the Met Office, who reports that there is almost no correlation between spring weather and summer weather, so nobody knows.

Briefly, the position on World Service *More or Less* is parallel to that for the Radio 4 broadcasts over the same period. The first programmes discussing the new virus were broadcast first on 1 and 15 February and used, essentially, items from the Radio 4 series first broadcast about the same time. More recently, since 14 March the World Service *More or Less* programmes have all been about COVID-19 and have very largely consisted of items

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that were covered on Radio 4. In two cases, though, the World Service item was broadcast before the Radio 4 version – on disease statistics in Iran, broadcast on the World Service on 14 March and on 25 March on Radio 4. The same applied to the following week's Service on 14 March and on 25 March on Radio 4. The same applied to the following week's World Service programme, first broadcast on 21 March, which featured an interview with Professor Christl Donnelly that covered different aspects to the interview with Donnelly on Radio 4 on 22 April. One other World Service item, on superforecasters, first broadcast on 18 April, has not yet popped up on Radio 4 to my knowledge.

This is not yet the whole story for this Radio 4 *More or Less* series. There will probably be at least four more programmes. Ideas will be worked on, but events will intervene, and it remains to be seen whether the programmes' huge concentration on COVID-19will continue. Personally, I feel that the team have had a good series so far, applying their usual recipe of thoughtful and informed discussion of the relevant numbers in a world where people have become much more interested in many aspects of health and disease statistics.