

Learning Brief

South African Medical Research Council scientists and the media. Attitudes to and experiences of reporting their findings to the public



Background

Many researchers consider their work finished once their research is completed, evaluated and published. Since science is a knowledge industry in which the 'mode of payment' is attention - careers of scientists often depend heavily on citation 'accounts'¹ - this is not surprising.

Most adults still learn about developments in science via the media.²⁻⁴ Media coverage of research (or lack of it) impacts on which research is supported by decision-makers,⁵ and research which receives media coverage is often cited more often in the ensuing scientific literature.⁶

Scientists have a responsibility to communicate their findings to a broader audience. A closer, more co-operative relationship between scientists and journalists is vital for promoting coverage of science.

However, there appears to be an 'international corporate culture' among scientists of mistrusting the media, historically viewing the press as "sensation-mongering dumb-downers unworthy of the time it takes to do an interview".⁷ As a 1997 study of over 1400 scientists and journalists in America stated: "Nowhere has the distrust toward journalists been so pronounced or so pervasive as in the science/technology community."²

By the beginning of the 21st century, the relationship between scientists and the media, and scientists' attitudes to and experiences of reporting their findings to the public had not yet been documented in South Africa.

A massive gulf has existed between science and the citizen in South Africa. Science came of age during the apartheid era with its attendant aura of exclusivity, secrecy and elitism. The government of 1994 made the democratisation of science a priority, and promoted popularisation of science as a key driver of socio-economic advancement.

Described as "the best established statutory research body in sub-Saharan Africa",⁸ the Medical Research Council (MRC) receives around 60% of its funding from the taxpayer, and hence is accountable to them. As a publicly funded body the MRC must be able to justify why it gets this money, as well as explain what

it does with it in terms of its mandate to improve the health status of the nation. Thus, it is crucial that MRC research findings be communicated to a public who are largely paying for the research to be carried out, and who stand to benefit from its results.

Although the MRC has an excellent track record in terms of research outputs, awareness of the organisation among the South African public is limited. Almost the only direct communication with the public happens when research involves members of specific communities (e.g. trial sites, research relating to human behaviour, etc.).

How can communication between the MRC's scientists and the media and public be boosted? First it had to be ascertained how the scientists felt about communication and interaction with the media and public, what their attitudes were, what their experiences had been, and how these had affected them.

Analysing the scientists' communication with public and media

Study methods and findings

A survey of every MRC-supported scientist - 253 in all - was sent in July 2000. One hundred surveys were returned (39.5% response rate). The responses represent a sizeable assembly of valuable information from many of the MRC's top researchers.

Almost half of the respondents had published more than 30 articles in journals. However, most of them (38.9%) had *never had their journal articles mentioned in the lay media* (see table page 2).

Who do the scientists think they should communicate their research to? 'The public' and 'policy makers' were considered as the most important, with 28.6% each. A further 3% nominated both these sectors together. 10.2% of the scientists chose 'peers/other scientists', and only 9.2% chose the media.

It is interesting that the public is jointly first selection as most important to communicate with, given the fact that most of the respondents' peer-reviewed

| Number of authored journal articles mentioned in the lay media | | |
|--|-------|--|
| 0 | 38.9% | |
| 1 to 2 | 22.1% | |
| 3 to 5 | 13.7% | |
| 5 + | 25.3% | |

| Trust to provide accurate scientific information | Public | Scientists |
|--|--------|------------|
| TV documentaries | 58% | 15% |
| TV news and current affairs programmes | 56% | 8% |
| Journalists working for the popular scientific press e.g. <i>New Scientist</i> | 51% | 44% |
| Journalists working for national newspapers | 43% | 5% |

| Contact with the media | |
|------------------------|-------|
| More than once a month | 3.0% |
| About once a month | 3.0% |
| Several times a year | 22.0% |
| Once a year | 19.0% |
| Every few years | 29.0% |
| Never | 24.0% |

journal articles have never been mentioned in the lay media. It is thus unlikely that much if any information about their research has ever actually reached the general public.

Barriers and benefits to a greater understanding of science. Seen as top *barrier* was the belief that there is ‘Little public understanding of what scientists do’ (59%), followed by ‘Lack of education’ (55%). Interestingly, ‘Lack of communication skills among scientists’ (53%) ranked third highest of the list of 16 options. ‘Insufficient media coverage’ was selected by 50% of respondents.

Most (81%) felt that the main *benefit* of a greater understanding of science was that it ‘Enables the public to make informed decisions about their lives’. Top *personal benefit* of communicating research to the public was seen as ‘Advancing the role of science’ (65%). The two greatest *personal disadvantages* were worries that ‘My research could be reported inaccurately’ (46%) and that it ‘Takes too much time’ (43%).

Where do people get their information from - and who do they trust? The scientists recognise that the non-specialist public are *most likely to glean their knowledge of scientific research and its implications from the lay media* rather than from scientific journals or even information published by bodies such as the MRC, or the ‘popular’ science press. Eighty-six per cent thought the public got their information about scientific research from local newspapers, while only 10% thought they got it from material published by bodies such as the MRC.

Scientists themselves don’t trust the media to provide accurate scientific information, but feel that the general public *do* trust the media to do so (see table).

Contact with the media. Fifty-six of the 100 respondents indicated that during the past year they had personally talked to the press or media about research in their field. Most had very rare contact in terms of science news coverage (see table).

Many of the scientists felt that the day-to-day requirements of their job left them with too little time to get on with research (36.4%), or to communicate the implications of their research with others (47.5%). However, in terms of responding to enquiries from the press or media, only 9% felt that they had ‘frequently’ had difficulty responding to the volume of enquiries.

Scientists did not rate general coverage of science and technology in the media very highly. While 43.2% said coverage on the international channel or programme that they watched most often was ‘good’ (and 8% ‘excellent’), only 7.4% judged coverage on national television news as being ‘good’ (and none as ‘excellent’). National and local newspapers and radio also fared badly. This indicates a serious lack of confidence in the national media.

Most (65.4%) of those whose work (or themselves) had been the source or subject of a news story had been either ‘very satisfied’ or ‘somewhat satisfied’ with the coverage they received. The scientists sometimes seemed to be hard taskmasters though - only ‘somewhat’ satisfied even when everything seemed to have gone well. Among the ‘somewhat dissatisfied’ comments, some reflected that the media were merely doing their job - which sometimes will entail not meeting the scientists’ needs in order to meet the public’s.¹⁰ When scientists label a piece ‘inaccurate’ they are often actually saying it is incomplete and lacks details.^{3,11,12}

Unrealistic expectations of the media can only be addressed by training the scientists in what the media are all about. A training programme introduced by the MRC in 2001 appears to be making strides in establishing a more realistic/evidence-based mind-set about the media. Twenty scientists at a time are invited to attend these intensive courses – clearly, the programme needs to be extended to reach more scientists in as short a time frame as possible.

Experiences of/feelings towards the media. A few broad themes became apparent from the scientists' comments. Some embraced the challenge, recognising the need for training in dealing with the media. Some bemoaned certain aspects of the media, such as their passion for sound bites and the lack of scientific journalists with an in-depth understanding of medical research. Others wanted to keep the reins tight: "The press should not be allowed to report on oral interviews with scientists. The press should be given written reports, and any deviations from the report should be strongly viewed."

Training in dealing with the media. The overwhelming majority (86.9%) had never had any media training, but there was great interest (80.8%) in taking such a course.

Sixty-seven per cent said that they would agree to be on an MRC list of 'expert contacts' for the media. Concerns of those that did not want to be on such a list included lack of training and experience in dealing with the media, as well as lack of time. Some just didn't want to be involved ("I don't like it personally"), or were nervous ("[I] Do not feel confident about speaking to media"). This lack of confidence is to be expected given the overwhelming lack of training in dealing with the media.

Communication by the MRC. The MRC had produced press releases or briefings on the work of 37% of the scientists in the previous year. A further 37% said they had research that was ripe for coverage - but most had not contacted anyone to discuss achieving this. Reasons included lack of time, not thinking about it or not bothering because such work is not rewarded or valued:

"The MRC has a system of rewarding scientific journal publications. Anything else, MRC views as 'less valued'. Why should I then bother to use time and energy for a press release that's not valued on my track record by MRC?"

This comment is a recurring one, arising in all other surveys of scientists and the media examined.^{2,9,14}

Thirty-two respondents had spent time on 'public understanding of science work' in the past year (mean 6.5 days, maximum 30). The scientists support the

MRC providing mechanisms for communicating with the public, including access to trained staff and training, and provided many useful ideas for interaction with the public and media.

Lessons learned

- For the scientists to be able to carry out communication activities around their research, encouragement and support must be provided by the MRC. *Time* will have to be allocated for communication, *training* will have to be provided, and *incentives* outlined. Allocation of time to communication would imply that this activity should be 'written in' as part of the scientists' jobs. Lack of time will remain a significant barrier as long as scientists feel they would be better off spending time from their crowded schedules on preparing formal publications and that their employer does not value efforts in media work.
- The MRC should formulate a policy for its scientists around the dissemination of results/interaction with the media that recognises and encourages such endeavours in some way.
- A cultural change is required before scientists will make more use of the media:

"It has to become an accepted, rewarded, recognised and legitimate activity, encouraged at the highest levels and actively promulgated through research organizations."¹⁴
- Many of the scientists' comments highlighted the need for various clear policies around communication by the MRC:
 - The MRC should formalise (and communicate to its own researchers) its policies around time and efforts to be spent on communicating research to the public and others and interaction with the media.
 - Policies must be agreed and communicated with the scientists about rewarding, recognising and encouraging such efforts.
 - The MRC needs a clearly spelt out media strategy giving guidelines on specific situations as well as on the Ingelfinger rule¹.
 - They also have to be clear on commercial agreements which preclude public disclosure.

¹ Under the editorship of Franz Ingelfinger, the New England Journal of Medicine in 1969 adopted a policy of declining to referee or publish research previously published or publicised elsewhere. Many other biomedical journals, as well as broad interest journals such as Science have since adopted this 'Ingelfinger rule'.

- The scientists generally want to communicate and see the potential benefits of it. However, barriers include lack of time, little trust in the media, little training in dealing with the media, and lack of support, encouragement and incentives.
- The Wellcome Trust/MORI survey⁹ found that participation in communication activity was related to the scientists' level of skill and confidence. As MRC scientists are trained in dealing with the media and become more comfortable doing so, it is hoped that communication activities will increase - especially if specified by MRC management as being expected, valued and rewarded.

Conclusion

It is clear that the scientists generally want to communicate and see the potential benefits of doing so. They recognise that the public are most likely to glean their knowledge of scientific research and its implications from the lay media. Most of the scientists believe that talking to the national (71%) or local (61%) press or TV and radio journalists (60%) or speaking on TV/radio (59%) are effective methods of communicating their own research and its implications to the public.

Journalists and scientists both have a responsibility to educate and inform the public in order to avoid misinterpretations and misapplications of science, but the scientists are the 'gatekeepers' to research findings. Science communication and development of links with community and media should be recognised as part and parcel of scientific research by research organisations, and given due recognition and support.

Scientists shouldn't hold popular science journalism to the standards of formal science writing - otherwise it will always be found wanting. The popular media have very different criteria, needs and aims, which the scientists should understand in order to get their message across effectively.¹³

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