

RESEARCH UTILISATION AT THE UNIVERSITY OF RWANDA

ORIGINAL AUTHOR: THEOGENE NYANDWI

What was the purpose of the study?

- (i) To establish the extent to which research utilisation and uptake (RU) were practised at the College of Medicine and Health Sciences (CMHS) at the University of Rwanda between 2004 and 2013.
- (ii) To review dissemination strategies within selected research projects, and the nature of collaboration among academic staff.
- (iii) To inform and build capacities in RU elsewhere.

Why are the findings of this study useful?

- (i) Research recommendations and RU considerations informed the university's new research strategy.
- (ii) Research, Innovation and Postgraduate Studies office now deals with dissemination issues identified in research results.
- (iii) New knowledge from this study may now be applied in:
 - a) Research management at CMHS, to enhance the visibility of researchers, who may review research content on the website.
 - b) Bibliometrics studies on research production and collaboration at the university.
 - c) Supporting innovation development to lay a foundation for wider RU.
 - d) Enabling CMHS to boost the university's role as a key national actor in disseminating research findings and influencing their use in solving social problems.

INTRODUCTION

Rwanda, like most developing countries, has seen low levels of research production and uptake by end users when compared with those observed in developed countries. Reasons for this range from a lack of motivation, the absence of research policies,

heavy teaching loads and a lack of sufficient research materials¹.

Researchers, policymakers and practitioners often share common goals in the knowledge-to-practice cycle. Yet few studies have been conducted in East Africa on the efforts of researchers to ensure their research evidence moves off the shelves to places where it can benefit scientists and society. This study

¹ Butera, Shyaka and Habimana, (2012)

attempts to shed light on the extent to which research uptake and utilisation (RU) were practised in the research projects of academics at the College of Medicine and Health Sciences (CMHS) at the University of Rwanda from 2004 to 2013.

The assimilation of scientific and technological information is seen as an essential precondition for progress. Yet research infrastructure and the capacity to absorb knowledge are poor in developing countries, including Rwanda, leading to low levels of scientific output, little assimilation and further underdevelopment².

Rwanda shares characteristics of the reported research-to-practice gap documented in other

developing countries, with less than half of the country's academics publishing in scholarly journals. National Council of Higher Education figures reveal that 3,002 academics in Rwanda published only 394 articles in 2009/ 2010³. This corresponds to 0.2 papers per academic, on average. The National University of Rwanda was responsible for 290 of these publications (73%). Researchers have cited the absence of a strategy for the promotion of the utilisation of research results as one factor inhibiting research production⁴.

The extent to which researchers have published or engaged in other activities that would lead to the use of research is unclear.

THE KEY RESEARCH QUESTIONS FOR THIS STUDY WERE:

- (i) What are the key characteristics of the research projects, namely areas of research; sources of funding, triggers for undertaking the research; and collaboration;
- (ii) What strategies were used to disseminate results?
- (iii) Who were the research beneficiaries?
- (iv) What levels of RU were achieved?

LITERATURE REVIEW

The research utilisation process can be interpreted in either a narrow or a broad sense⁵. The narrow interpretation of RU refers to economic or commercial utility. The broad interpretation is any form of use of scientific research results.

Research results can be utilised by the public (social utility—for example using a new technology), or by politicians and policymakers

when making decisions (political utility). These utilities are referred to as non-epistemic forms of RU. Another form of utilisation is when scientists use other scientists' findings, or the models and frameworks developed by other scientists. This is referred to as epistemic utility.

Knowledge utilisation can also be approached from the so-called two-communities perspective⁶, which highlights cultural differences between researchers and policymakers—two groups, worlds apart, with different and often conflicting values, reward

² Chan & Costa, 2005

³ Sindayigaya, 2010

⁴ Butera et al, 2012

⁵ Bailey and Mouton (2005)

⁶ Caplan, 1979

systems and professional languages. This divide could be bridged if knowledge producers and users were to collaborate and communicate about problems, the identification of problems, informing policymakers, and understanding aspects of problems that need data-based knowledge.

Dissemination strategies used by respondents in this study were predominantly academic (conference proceedings, journal publications), with few other strategies reported. This reveals a gap that needs bridging. For research to be better utilised, materials need to be developed for specific targeted audiences, and actions suggested⁷. Other strategies include gathering information about the needs of audiences, the development of research products applicable to end users, collaboration with knowledge brokers, radio and television to widen reach.

In this study, researchers' efforts to promote the uptake of their research results were heavily biased towards disseminating rather than applying the results. Most of the respondents completed the transmission phase of RU, but not the application phase.

The epistemic utility was evident in the study, but impacts on the economic, social, or political utilities were hardly present⁸.

METHODOLOGY

The study was done in two stages, firstly by conducting an online survey and, secondly, by way of semi-structured interviews with three selected researchers.

The survey collected data on the extent of perceived levels of RU among academic staff at

CMHS. Of the 210 academics who possessed postgraduate qualifications and constituted the sampling frame, 62 completed the survey (47% response rate), while 61 provided detailed information about a single, health-sector related research project conducted between 2004 and 2013.

Three semi-structured interviews were conducted to contextualise the quantitative information collected. The interviewees were selected on the strength of their responses to the survey questions.

LIMITATIONS

The study's main limitation is its small sample size. Some participants did not conduct any research during the years under review, while others were away from the university at the time of data collection. A number of respondents were on study leave, had moved to other institutions, or had work responsibilities in other parts of the country. The small sample size affects the generalisability of the results.

RESULTS

The results from the survey showed respondents' basic profiles and key features of the research projects, and finally reflected levels of utilisation of research results. More than half of the survey respondents (59%) reported that their research results had been utilised to some extent by the intended beneficiaries. Data from the three interviews revealed that the challenges inherent in ensuring the uptake and utilisation of research results were related mostly to limited funding,

⁷ Boshoff and Mouton (2005); Lavis et al. (2010)

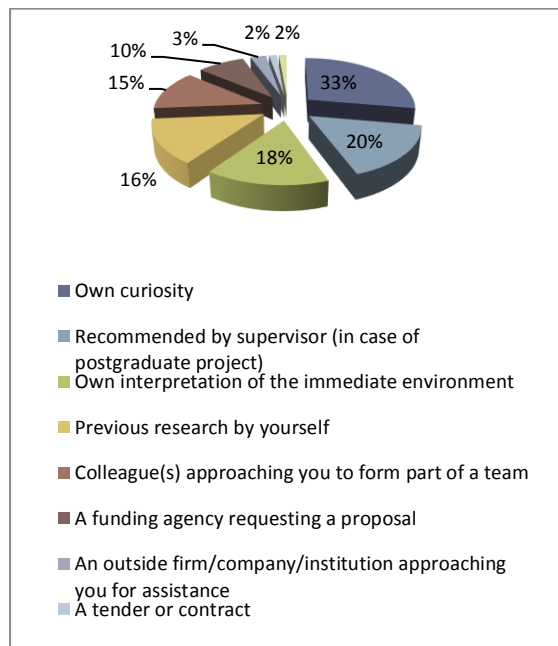
⁸ Bailey and Mouton, 2005

heavy teaching loads and, in some instances, limited research skills of the academic staff.

RU was not a new concept for researchers. However, perceived levels of the uptake and utilisation of their research, together with the limited initiatives the researchers had engaged in to disseminate their research results outside the scholarly community, resulted in a largely academic impact.

International agencies accounted for 31% of sources of funding, with the Student Financing Agency of Rwanda a major local source of funding, followed by self-financing, government funding and NGO funding. The figures strongly indicate that overseas funding is the main source of research funding.

Factors that triggered research (N=60)



Altogether 80% of respondents collaborated with others on their projects. Collaborators were mainly from other academic or research communities (60% of academics in Rwanda; 58% outside Rwanda), with negligible collaboration taking place with industry (2%).

Intended beneficiaries ranged from colleagues and scholars in their own discipline (57%) to government agencies (44%), the general public (36%), interest groups such as farmers and teachers (30%), scholars in other disciplines (30%). Very few (3%) reported that their research was tailored to benefit either industry or business.

The main envisaged research outcome was the advancement of knowledge, (82%), and this outcome was achieved by 59%. The second most anticipated outcome was to influence policy or decisions (44%). The success of achieving this outcome was estimated at 42%.

Thus, the main anticipated outcomes were mostly scientifically oriented, with very few outcomes reported for practical applications.

Conference presentations were the most used communication channels (60%), followed by articles in peer-reviewed journals (50%).

CONCLUSION AND RECOMMENDATIONS

This study focused on levels of uptake and utilisation of research results produced by academics at CMHS between 2004 and 2013. It shows that RU is not a new concept for researchers, but perceived levels of RU, along with the limited initiatives researchers engaged in to disseminate research results outside the scholarly community, resulted in largely academic impacts.

The study recommended, inter alia, that researchers be encouraged to undertake projects with more potential for RU and impact, while embracing collaboration with stakeholders from research-conceptualisation stage. They should also compete for projects with research funding attached, and use

channels of dissemination that reach beyond academic forums.

The CMHS should institutionalise RU to a greater degree, while advocating for more funding for RU activities. It should also institute reward mechanisms for RU activities.

Case studies of RU should offer not only the perspective of the researchers, but also the views and practices of users.

AUTHOR'S REFLECTIONS:

The university has institutionalised RU throughout its six colleges by establishing the Research, Technology Transfer and Consultancy Centres, staffed by people that deal with innovation and RU. It has also drafted an RU strategy.

A research web portal has been developed to allow the wider community access to all materials related to ongoing research, publications, ethics and uptake.

Mechanisms are now in place to further entrench RU through funding for an annual research exhibition. The CMHS was the second to win the grant after the College of Agriculture, Animal Sciences and Veterinary Medicine.

The University of Rwanda, in partnership with the Swedish International Development Agency (SIDA), has launched an initiative on innovation and the better use of research results.