



**Report of the Survey on Non-Communicable
Disease Activity in IAMP Member
Academies**

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August 2015

Foreword

As countries develop and become wealthier, they tend to experience a shift from the higher prevalence of infectious diseases of the past towards non-communicable diseases (NCDs), especially linked to demographic transitions towards more elderly populations.

But NCDs are not only a growing problem in countries with high high-incomes and rapidly expanding economies. Many low- and middle-income countries are developing their healthcare systems and beginning to make in-roads into increasing life expectancy, and NCDs are becoming of increasing concern in these countries too.

It was for these reasons that IAMP has increased its focus on NCDs, supporting a regional workshop in Brazil on ‘NCDS: Prevention and Control of Cardiovascular Diseases and cancer’¹ in May 2012, and further highlighting the issue during its August 2013 general conference. Hosted by the Academy of Science of South Africa (ASSAf) in Johannesburg, the conference focused on ‘Changing Patterns of Non-communicable Diseases’².

At the same time, IAMP member academies were surveyed to determine the level of their engagement on NCD issues, as well as their plans for the future. It is the scope of these activities that are reported in this report. The document has been compiled by Stephanie K. Lu and Susan J. Elliott, School of Public Health and Health Systems, University of Waterloo, Canada, to whom we extend our sincere thanks. Thanks must also go to Lucilla Spini, former IAMP coordinator, who oversaw the development and implementation of the IAMP member academy survey, as well as to the IAMP executive committee members who provided feedback on an earlier draft of the report.

Form the report, it is clear that many academies have engaged on the issue of NCDs, especially when providing policy advice to governments – a prime raison d’etre for academies. However, it is also clear that many other academies have yet to integrate work on NCDs into their activities.

As we move towards 2017 and 2018, the World Health Organization is also gearing up to put the NCDs issue at centre-stage, with a series of progress indicators being set out for countries to consider when setting up their NCD policies. We hope that by focusing IAMP member academies’ efforts on the NCDs issue and developing these activities in line with national and international guidelines, then IAMP and its member academies can play a significant role in reducing the effects of these often-avoidable burdens in and on our societies.

IAMP co-chairs



Lai Meng Looi



Detlev Ganten

¹ For a full report, see: <http://www.iamp-online.org/sites/iamp-online.org/files/Non-Communicable%20Diseases%20Report%20%28BAS%26NAM%2CBrazil%29.pdf>

² See: <http://www.iamp-online.org/changing-patterns-non-communicable-diseases> and <http://www.assaf.co.za/wp-content/uploads/2015/05/Non-Communicable-Diseases.pdf>

Introduction

In preparation for the IAMP Scientific Conference on ‘Changing Patterns of Non-Communicable Diseases’ to be hosted by the Academy of Science of South Africa (ASSAf) in August 2013, a survey was conducted to collect data that would allow us to describe the level and types of activities related to non-communicable diseases (NCDs) being undertaken by IAMP member academies. The survey was initiated in light of the Political Declaration of the High-level Meeting of the United Nations General Assembly on the Prevention and Control of NCDs, an article from *The Lancet* on the NCD Alliance, as well as the ensuing call to IAMP member academies to organize activities on NCDs.

Member academies were given the following definition of NCDs, taken from the World Health Organization, to guide their thinking in response to the survey:

The four major NCDs are cardiovascular diseases, diabetes, cancers, and chronic pulmonary diseases. Risk factors for the four major NCDs include tobacco use, physical inactivity, unhealthy diets, and harmful use of alcohol. Other conditions associated with the major NCDs include renal, endocrine, neurological, haematological, gastroenterological, hepatic, musculoskeletal, skin and oral diseases, genetic disorders, mental disorders, disabilities, violence and injuries.

Methods

A draft survey was initially developed by researchers in the School of Public Health and Health Systems at the University of Waterloo, Canada (Lu, Elliott), in consultation with the IAMP Coordinator (Lucilla Spini) and Co-chairs (Lai Meng Lui and Jo Boufford). A decision was made to distribute the survey as a locked word file in order to facilitate easy completion without having to rely on internet access. It was distributed 9 July 2013 to all 70 of the IAMP member academies via e-mail with an invitation to participate in the survey. Responses were requested by 1 August 2013. A reminder e-mail was sent on 29 July 2013. A response rate of 43% was obtained; in total, 34% of the member academies completed the survey.

Respondents were instructed to report on the level and type of activity related to NCDs undertaken in the past 5 years. Several member academies reported up-coming activities as well. While important, these are not included in the data analysis presented below.

Results

Respondents were asked to report the level of activity they are currently involved in with respect to non-communicable diseases, as defined above, both currently and where they saw themselves 5 years in the future. Specifically, academy representatives were asked ‘how would you rate your academy’s current level of activity with respect to NCDs, with 1 being low level of activity and 10 being high level of activity?’ Academy representatives were then asked to rate the level of activity they would expect to see in their academy five years into the future. Essentially, there was little change between the current and projected future state of level of NCD activity, with the current average rating at 6.0 and the future rating at 7.1.

With respect to the various aspects of NCD activity undertaken among the academies that responded to the survey, these included those targeted across a range of outcomes and risk factors (Table 1), with virtually equal focus on CVD, cancer and diabetes, as well as the key risk factors (tobacco use, physical inactivity, and unhealthy diet).

Table 1: Aspects of NCDs addressed by member academies (n=24)

| NCDs | | No. of member academies (% of total) |
|--------------|----------------------------|-----------------------------------------|
| Outcomes | Cardiovascular disease | 19 (79) |
| | Cancer | 17 (71) |
| | Diabetes | 15 (63) |
| | Chronic pulmonary diseases | 7 (29) |
| Risk factors | Unhealthy diet | 15 (63) |
| | Tobacco use | 13 (54) |
| | Physical inactivity | 12 (50) |
| | Harmful use of alcohol | 10 (42) |
| Other | | 10 (42) |
| Total | | 24* (100) |

* This is not equal to the sum of the numbers in the column due to multiple responses

A broad range of activity types were reported (Table 2) with an obvious focus on knowledge translation (e.g., workshops/conferences), knowledge dissemination (e.g., position papers/statements; publications) and knowledge mobilization (e.g., training sessions/capacity building activities) as opposed to knowledge creation (i.e., research).

Table 2: Types of activities undertaken by member academies (n=24) over the past 5 years

| Type of activity | No. of member academies (% of total) |
|----------------------------------------------------|-----------------------------------------|
| Workshops and conferences | 19 (79) |
| Publications | 17 (71) |
| Public lectures and awareness-raising events | 15 (63) |
| Position papers and statements | 12 (50) |
| Research projects | 9 (38) |
| Training sessions and capacity-building activities | 7 (29) |
| Social Media | 7 (29) |
| Other | 7 (29) |
| Total | 24* (100) |

* This is not equal to the sum of the numbers in the column due to multiple responses

Although relatively few member academies mentioned research as a type of activity (9; Table 2), a large number of research projects (69) were undertaken (Table 3). The only other activity mentioned with greater frequency was workshops and conferences (84), with dissemination

activities (public lectures/awareness raising; position papers and statements; publications) being reported in lower frequencies (Table 3).

Table 3: No. of activities undertaken by member academies over the past 5 years

| Type of activity | No. of activities (% of total) |
|----------------------------------------------------|-------------------------------------------|
| Workshops and conferences | 84 (30) |
| Research projects | 69 (25) |
| Public lectures and awareness-raising events | 40 (14) |
| Publications | 37 (13) |
| Position papers and statements | 14 (5) |
| Social Media | 14 (5) |
| Other | 12 (4) |
| Training sessions and capacity-building activities | 9 (3) |
| Total | 279 (100) |

With respect to the focus of these activities (Table 4), member academies reported that a large number address cancer (20%) and unhealthy diet (22%). Many activities reported have focused on “other” aspects related to NCDs (30%) such as “violence and injury” and “mental health”.

Table 4: Focus of activities undertaken by member academies over the past 5 years

| NCDs | No. of activities (% of total) | |
|--------------|-------------------------------------------|---------|
| Outcomes | Cardiovascular disease | 27 (8) |
| | Cancer | 65 (20) |
| | Diabetes | 21 (7) |
| | Chronic pulmonary diseases | 12 (4) |
| Risk factors | Unhealthy diet | 70 (22) |
| | Tobacco use | 13 (4) |
| | Physical inactivity | 6 (2) |
| | Harmful use of alcohol | 11 (3) |
| Other | 97 (30) | |
| Total | 322 (100) | |

Member academies were asked to report on the target audiences they focused on for each of the activities they undertook with respect to NCDs. A wide range of audiences was reported (Table 5), with the primary focus being policy makers (25%) followed by health care professionals (20%), general public (20%) and scientists/researchers (14%). It would appear that few of the member academy activities related to NCDs address more vulnerable populations (i.e., women, youth, seniors, low income; Table 5).

Table 5: Target audience of activity

| Target audience | No. of activities (% of total) |
|------------------------------------------------------------------------|-------------------------------------------|
| Policy makers | 116 (25) |
| Health care professionals (i.e., doctors, nutritionists, nurses, etc.) | 94 (20) |
| General public | 94 (20) |
| Scientists/researchers | 64 (14) |
| Academic/research institutions | 24 (5) |
| Young scientists | 21 (4) |
| Educators (elementary to high school level) | 14 (3) |
| Veterans | 11 (2) |
| Students (elementary to high school level) | 8 (2) |
| Agricultural/food industry | 7 (1) |
| Women | 5 (1) |
| Youth | 5 (1) |
| Seniors | 3 (1) |
| Low income | 1 (<1) |
| Other NGOs | 1 (<1) |
| Specific patient group | 1 (<1) |
| Total | 468 (100) |

For each of their reported activities, member academies were asked to define at what scale the activity was undertaken (Table 6). The majority of activities were conducted on a national level (75%), whereas few were done on a local (6%) or regional level (4%).

Table 6: Scale of Activity

| Scale | No. of activities (% of total) |
|---------------|-------------------------------------------|
| Local | 15 (6) |
| Regional | 10 (4) |
| National | 191 (75) |
| International | 40 (16) |
| Total | 256 (100) |

Member academies were asked to report the types of partners they interacted with when undertaking activities related to NCDs (Table 7). Many activities were undertaken with universities (27%), an NGO (16%), or a board of health professionals (14%).

Table 7: Partners in activity

| Partners | No. of activities (% of total) |
|-------------------------------|-------------------------------------------|
| University | 39 (27) |
| NGO | 24 (16) |
| Board of health professionals | 20 (14) |
| Research institute | 18 (12) |
| Government | 16 (11) |
| Member academy | 16 (11) |
| Hospital | 10 (7) |
| School board | 1 (1) |
| Media | 1 (1) |
| Industry | 1 (1) |
| Total | 146 (100) |

Member academies were also asked to report deliverables and impact stemming from the activities related to NCDs that they undertook. This open-ended question elicited a range of responses; however, not all of the academies that responded to date (August 9, 2013) responded to this question. In addition, three were completed in languages other than English and could therefore not be included here without translation facilities. In the end, we had valid data for this question from 18 of the 24 academies who completed the survey. These data indicate (Table 8) that – of those 18 academies that completed the survey – many provided advice to government as a result of their NCD activities (24%), a large portion produced a publication of some sort (technical or evaluation report, workshop summary, peer reviewed publication), while 18% undertook a public knowledge dissemination activity (e.g., a public lecture). Few impacts/deliverables were active in nature (e.g., change of practice (5%), capacity building (3%), and training session (1%)).

Table 8: Deliverables and impact reported by n=18 academies

| | No. of activities (% of total) | |
|---------------------|-------------------------------------------|---------|
| Deliverables | Advice to government | 71 (24) |
| | Technical or evaluation report | 58 (20) |
| | Knowledge dissemination – public | 53 (18) |
| | Workshop Summary | 43 (15) |
| | Peer reviewed publication | 20 (7) |
| | Training session | 3 (1) |
| | Knowledge dissemination – schools | 3 (1) |
| | Patent | 1 (<1) |
| | Web-based application | 1 (<1) |
| Impact | Awareness amongst academies | 17 (6) |
| | Change of practice | 16 (5) |
| | Capacity building | 9 (3) |
| Total | 233 (100) | |

At the conclusion of the survey, academy representatives were asked if they had any suggestions about how IAMP might facilitate the work of their academy on NCDs. Half of the academies who completed the survey provided suggestions, the majority of which related to the provision of additional funds/resources to support activities.

*The **InterAcademy Medical Panel (IAMP)** is a network of more than 70 of the world's medical academies and medical sections of academies of science and engineering. Hosted by The World Academy of Sciences (TWAS) in Trieste, Italy, it is committed to improving health world-wide.*

The goals of the IAMP are:

- *to strengthen the capacity of academies to provide evidence based advice to governments on health and science policy;*
- *to support the creation of new medical academies;*
- *to support the creation of projects by member academies to strengthen research and higher education in their countries; and*
- *to issue consensus statements on matters of importance to global health.*

For more information on IAMP, please visit: www.iamp-online.org