



the interacademy partnership







© Academy of Science of South Africa December 2016

ISBN 978-0-9947076-0-4

DOI: http://dx.doi.org/10.17159/assaf.2016/0006 Please use the DOI in citation.

Published by:

Academy of Science of South Africa (ASSAf) PO Box 72135, Lynnwood Ridge, Pretoria, South Africa, 0040

Tel: +27 12 349 6600 • Fax: +27 86 576 9520

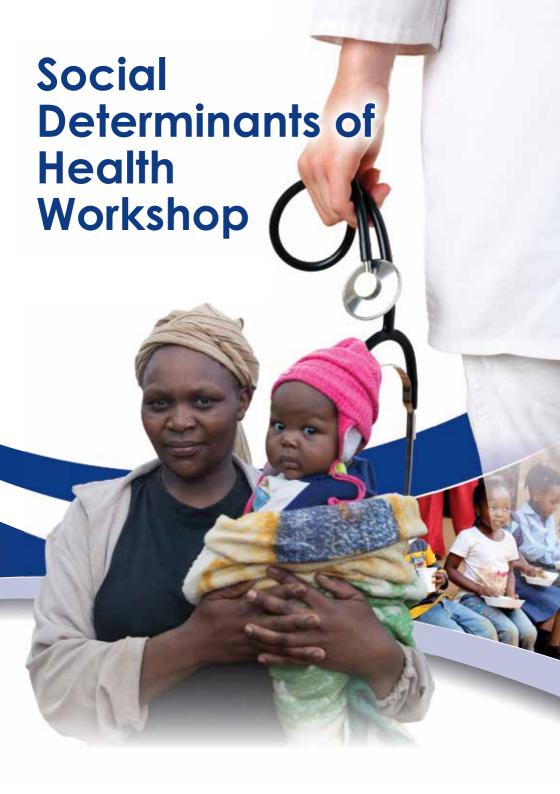
E-mail: admin@assaf.org.za

Reproduction is permitted, provided the source and publisher are appropriately acknowledged.

The Academy of Science of South Africa (ASSAf) was inaugurated in May 1996. It was formed in response to the need for an Academy of Science consonant with the dawn of democracy in South Africa: activist in its mission of using science and scholarship for the benefit of society, with a mandate encompassing all scholarly disciplines that use an open-minded and evidence-based approach to build knowledge. ASSAf thus adopted in its name the term 'science' in the singular as reflecting a commonway of enquiring rather than an aggregation of different disciplines. Its Members are elected on the basis of a combination of two principal criteria, academic excellence and significant contributions to society.

The Parliament of South Africa passed the Academy of Science of South Africa Act (Act 67 of 2001), which came into force on 15 May 2002. This made ASSAf the only academy of science in South Africa officially recognised by government and representing the country in the international community of science academies and elsewhere.

This report reflects the proceedings of the Social Determinants of Health Workshop held on 7 and 8 November 2016 at the Garden Court – OR Tambo Hotel, Johannesburg, South Africa. Views expressed are those of the individuals and not necessarily those of the Academy nor a consensus view of the Academy based on an in-depth evidence-based study.





CONTENTS _____

LIST OF ACRONYMS	3
ACKNOWLEDGEMENTS	4
WELCOME AND RECAPPING DAY 1 (FACILITATOR: DR TOLULLAH ONI, SAYAS)	5
THEME 1 MONITORING DATA: NUMBERS THAT WORK – DATA AVAILABILITY AND USE TO IMPROVE SOCIAL WELL-BEING (FACILITATOR: DR TOLULLAH ONI, SAYAS)	6
Data Compatibility and Integration as Measures of Addressing the Impact on Social Determinants of Health (Ms Belinda Nabukalu, HealthNet Consultant and Uganda National Young Academy)	6
Questions/Comments	6
Measuring Impact and Monitoring SDH Indicators (Dr Mariamawit Y Yeshak, Addis Ababa University and Ethiopian Young Academy of Science)	7
Questions/Comments	8
'Gendered' Data – Measuring Lived Experiences for Men and Women for Equitable Health (Dr Papa Diop, Académie Nationale des Jeunes Scientifiques du Sénégal)	8
Questions/Comments	9
THEME 2 HEALTH IN ALL POLICIES: MAINSTREAMING HEALTH AS A MEASURE ACROSS ALL SECTORS TO ADDRESS SDH (FACILITATOR: MS BELINDA	11
NABUKALU, UGANDA NATIONAL YOUNG ACADEMY)	11
Achieving Policy Coherence at National, Regional and Global Levels to Address SDH and SDGs (Dr Michieka Okioga Michieka, Kenya National Young Academy of Scientists)	11

Urgency for People at Risk and Marginalised Groupings (Health in All Policies/Migration in All Policies) (Prof Jo Vearey, University of the Witwatersrand (SAYAS))				
Approaches in Other Settings to Mainstream Health across All Sectors				
(Dr Fadzai Mutseyekwa, Zimbabwe Young Academy of Science) Questions/Comments	12 13			
THEME 3 CONFERENCE STATEMENT (FACILITATOR: DR TOLULLAH ONI, SAYAS)	15 15			
Small Group Breakaway Discussions				
Report Back	15			
Discussion and Conference Statement	15			
Closure	16			
APPENDIX 1	17			
GAUTENG DECLARATION ON SOCIAL DETERMINANTS OF HEALTH IN AFRICA	17			
APPENDIX 2	23			

LIST OF ACRONYMS _

AMASA Annual Meeting of African Science Academies

ASSAf Academy of Science of South Africa

DHS Demographic Health Surveys

GYA Global Young Academy

IAMP InterAcademy Medical Panel

IAP InterAcademy Partnership

NAS Nigerian Academy of Science

SAYAS South African Young Academy of Science

SDGs Sustainable Development Goals

SDH Social Determinants of Health

UNAS Uganda National Academy of Sciences

UNDP United Nations Development Programme

WHO World Health Organisation

YAS Young academies of science

ACKNOWLEDGEMENTS

This short report is the summary of the workshop proceedings which took place from 7 - 8 November 2016 at the Garden Court – OR Tambo Hotel, Johannesburg, South Africa. The workshop focused on Social Determinants of Health and further explored whether reduced poverty levels have had an impact on enhancing health, the independent effects of inequality and an exploration of the variation in circumstances across Africa.

The workshop was held as a follow-up to the InterAcademy Medical Panel (IAMP) workshop entitled Promoting Action on the Social Determinants of Health (SDH) that was held in Italy in July 2014.

The purpose of the workshop, organised by the South African Young Academy of Science (SAYAS), was to deliberate on policy engagement on SDH in Africa and interrogate shortfalls thereof. This was with a view to producing a Conference Statement with recommendations that will assist policymakers to formulate or implement policies that address SDH issues in Africa in a holistic manner. Key representations were from young academies of science (YAS) in Africa.

SAYAS acknowledges the Academy of Science of South Africa (ASSAf), the Nigerian Academy of Science (NAS) and the Uganda National Academy of Sciences (UNAS) for their assistance in the planning phase. We also acknowledge funding received from the InterAcademy Partnership (IAP) for Health, formerly InterAcademy Medical Panel (IAMP) without which we would not have been able to organise this workshop.

We also thank all the workshop participants (Annexure A) in their different roles, for enriching the discussions and sharing their experiences.

SAYAS recognises the role of its outgoing Co-Chairs Dr Tolullah Oni and Prof Voster Muchenje, ASSAf staff Ms Edith Shikumo, Young Scientist Liaison Officer and SAYAS Secretariat, and Ms Marvin Mandiwana, Liaison, Team Assistant, in their various roles and for their contributions to this project.

Dr Tolullah Oni Outgoing Co-Chair, SAYAS

WELCOME AND RECAPPING DAY 1 __

(FACILITATOR: DR TOLULLAH ONI, SAYAS)

Dr Oni welcomed everyone to the workshop and invited introductions.

Dr Oni noted that urbanisation and how it impacted on different social determinants, the disease burden and the need to look at the social determinants of communicable diseases, and innovative approaches to improving the Social Determinants of Health (SDH) were addressed during Day 1 of the Annual Meeting of African Science Academies (AMASA) proceedings hosted by the Academy of Science of South Africa (ASSAf).

This workshop was an opportunity for young scientists to present their perspectives on the SDH that were making a resurgence in the Sustainable Development Goals (SDGs).

This working meeting would look at how to address the SDH from the perspective of measurement and the challenges beyond the health sector and how to address these.

A conference statement would be the outcome of the workshop. The second half of the workshop would involve group discussions on the draft conference statement to allow for the incorporation of the various perspectives, as well as recommendations based on the discussions.

THFMF 1

MONITORING DATA: NUMBERS THAT WORK – DATA AVAILABILITY AND USE TO IMPROVE SOCIAL WELL-BEING

(FACILITATOR: DR TOLULLAH ONI, SAYAS)

Data Compatibility and Integration as Measures of Addressing the Impact on Social Determinants of Health (Ms Belinda Nabukalu, HealthNet Consultant and Uganda National Young Academy)

Many countries and international organisations already collect data on SDH in one form or another, but the data are dispersed across a multitude of information systems and are not presented or analysed alongside health data.

In order to achieve health equity, morbidity and mortality data need to be disaggregated by different socioeconomic factors as a means to guide health policy. SDH data are applied at individual level interventions, for system or institutional level interventions and for community or societal level interventions.

Collecting SDH data has numerous challenges and limitations including:

- A lack of knowledge and consensus about best practices.
- A lack of effective multi-sector collaboration.
- Ethical issues regarding privacy and confidentiality.
- Political agendas.

The eradication of inequity in health in line with the SDGs requires the elimination of inequalities in relation to SDH. It is necessary to continue improving health information systems and population health data so as to facilitate the monitoring of progress and inequities, and to move beyond routine analyses based mostly on data at the individual level and include data from other sectors.

Questions/Comments

Although child mortalities are underreported, the data do exist in the African context and are being collected. The Demographic Health Surveys (DHS) have helped to inform child mortalities in general. Capturing adult health data and including these into the DHS remain a culturally related challenge encountered in the field.

The complexities of measuring indicators in different settings are important, particularly in the context of data availability. Cognisance must be taken of the contextual situation when collecting data to ensure that data are collected in a way that is relevant to the specific cultural context.

The purpose of the data and how it is to be packaged must be kept in mind when collecting data. Innovation is in collecting of data and how measures can be estimated.

When rolling out health across different sectors, it is necessary to standardise the methodologies and indicators across the sectors while retaining the value for each sector.

The DHS data are useful as a standard instrument that allows for comparison across different countries within health. Although DHS data are not of a good quality, the information collected as part of the DHS is sufficient to represent a nationwide picture.

Intra-region/city/country analysis is very important. In South Africa, other surveys, such as the Quarterly Labour Force Survey gives better insight into kinds of issues addressed in the DHS. We need to start thinking about how to connect with demographic surveillance sites, map the gaps and expand the urban health surveillance sites. We need to be cautious about DHS data and much more critical of the data that do exist, and be aware of (and publish about) their limitations and how poor these data sources are. It is important to broaden our scope in terms of where we look for data in addition to having more compatible indicators.

Community health organisations and community health workers in Uganda deal with the SDH variables on a daily basis in interactions with patients who are more open to share information with them than with researchers. An integration of community health organisations and the health care institutions would improve the quality of SDH data within the health care systems.

Measuring Impact and Monitoring SDH Indicators (Dr Mariamawit Y Yeshak, Addis Ababa University and Ethiopian Young Academy of Science)

Health inequity is an issue in all countries and has to be addressed through the SDH if the SDGs are to be attained. One of the objectives of the World Health Organisation (WHO) Commission on Social Determinants of Health, set up in 2005, was to measure and understand the problem and assess the impact of action.

Interventions intended to reduce inequities can be focused on one of several distinct goals or targets and each one may require a separate indicator.

Health indicators should directly associate the social conditions with the health status of the population studied, and contain an explanatory power on existing gaps and gradients between population groups.

An explorative qualitative study done at the Addis Ababa University School of Public Health on why women in urban settings fail to use available maternal health services concluded that programmes must consider individual, sociocultural and institutional factors, and health interventions in urban settings should be tailored to various populations.

In summary, social inequities in health are the systematic differences in health status between different socioeconomic groups. These inequities are socially produced (and therefore modifiable) and unfair. Ensuring that health inequity is measured is a vital platform for action (WHO, 2008).

Questions/Comments

The cost of health care is a major reason why people do not access available services.

Some of the reasons why it has been difficult to mainstream health across the different sectors have to do with funding. Donor communities like to see concrete figures that are measurable. Equity issues are not always measurable nor are they easy to measure. This is one of the challenges faced by social interventions. Advocacy with the donor community is essential if our programmes are to meet the SDGs.

In terms of the cultural barriers to health care and the cultural perceptions of health care workers (as reflected in the study), there should be strong advocacy to ensure that health care workers are able to address the issues presented to them in a way that protects patients.

'Gendered' Data – Measuring Lived Experiences for Men and Women for Equitable Health (Dr Papa Diop, Académie Nationale des Jeunes Scientifiques du Sénégal)

In many societies, gender is a fundamental source of discrimination where members of a socially defined group are treated differently and unfairly by their inclusion in the specific group. The difference between inequity and inequality is very important in gender issues. Any difference between men and women in a health indicator must take into account the expected biological difference and survival of women over men.

SDH are the economic and social conditions under which people live, which determine their health outcomes. They are societal risk conditions rather than

individual risk factors that either increase or decrease the risk of disease.

A number of diseases continue to afflict persons who live in and travel to Senegal. These include malaria, syphilis, tuberculosis, cholera and HIV/AIDS. The rate of HIV/AIDS in Senegal is one of the lowest in Africa, at approximately 0.9%. About 20% of Senegalese women undergo female genital mutilation.

Questions/Comments

Public health policy and the role of food and nutrition in SDH were not addressed in any of the presentations.

A possible reason for the low prevalence of HIV in Senegal (0.9%) is the effectiveness of prevention programmes.

Gendered data are interesting, particularly in the context of the broader SDH. There has not been enough comparative work between regions and countries that highlight strategies that work well and those that do not. It would be useful to have shared learning across the region so that we are not all individually reinventing the wheel.

More gender data are needed. The information we have should be disaggregated based on gender. This will give us the distribution between male and female, which serves as a proxy for understanding possible gender differences. According to the social science literature, gender differences can only be captured through qualitative studies.

There is a need to look at population-type indicators, even when they are quantitative and not an individual level indicator. In addition to qualitative, there are also auantitative aroup measures that can be considered when applying the gender lens.

The figures based on quantitative data are understood more easily by policymakers than personal, qualitative, in-depth data.

This discussion highlights the importance of mixed methods and the need for researchers to be confident in engaging in both quantitative and qualitative data. Policymakers are sometimes more comfortable with bad, big data than with good-quality small data. It is about putting the two together and how to do this. We need to be able to translate the data in a way that reassures policymakers.

Policymakers need to make decisions that affect populations and they must be able to justify their decisions. Percentages are helpful in this regard, but

qualitative data are useful to highlight the narratives behind the figures. It is important to be able to qualitatively describe what the numbers mean from the policymakers' perspective. The issues of culture, awareness, perception and so on need to be qualitatively explained to the policymakers in order for them to initiate appropriate interventions. We often underestimate the power of the narrative in reminding policymakers that they are dealing with human beings. The international funding community tends to respond positively to being presented with graphs and statistics supported by narratives and illustrations.

This raises the issue of data generated at multiple levels. Smaller scale does not necessarily mean not quantified or representative. Small cross-sectional ad hoc surveys that have very good data do not always meet the assumptions of what is expected in terms of quantity data that is generalisable. We need to find ways to have data generated at different levels or quantitative data that is multi-levelled and allows for multi-levelled modelling, using different methodologies and different approaches, according to the specific context.

It is important to flag that while socioeconomic and environmental SDH are often mentioned, the psychological environment as a social determinant is sometimes a key barrier to health equity. The mental health and well-being component is often neglected. The psycho-social dimension stems from the other SDH and is among the factors that directly relate to mental health outcomes.

It is sometimes helpful to frame the psycho-social aspects around daily stresses to see how the lack of access to positive determinants of health causes stresses, which become further determinants of health.

The complexity and the constant feedback loops needs to be better articulated.

According to the WHO's overview of the SDH of mental health, "a person's mental health and many common mental disorders are shaped by various social, economic, and physical environments operating at different stages of life". Mental health does not stand alone.

It is important to note that there are SDH of mental health and psycho-social determinants of physical health. Physical health outcomes also have a bearing on the psycho-social determinants.

- The importance of taking the context into account when measuring SDH (the cultural dimension of measuring certain indicators of accessing health, engaging with different sectors to harmonise methodologies, funding (in terms of better understanding health inequity and the potentially perverse incentives), the data sources available (limitations of the DHS, different degrees of availability of 'non-health' data that can inform the SDH in different settings), or target populations).
- Methodology and the importance of mixed methodology, particularly when speaking to policymakers and funders, addressing SDH and from a research perspective.
- The need to advocate for better shared learning or comparative work across the region, understanding that the contexts are different.

THEME 2

HEALTH IN ALL POLICIES: MAINSTREAMING HEALTH AS A MEASURE ACROSS ALL SECTORS TO ADDRESS SDH

(FACILITATOR: MS BELINDA NABUKALU, UGANDA NATIONAL YOUNG ACADEMY)

Achieving Policy Coherence at National, Regional and Global Levels to Address SDH and SDGs (Dr Michieka Okioga Michieka, Kenya National Young Academy of Scientists)

Different nations across the globe have differing policies due to the diversity of their environments, yet the SDH and SDGs require a globally unified policy system. This complex process could be broken down to certain levels in order to achieve common goals. Health is the one key area that is uniform to all countries.

The numerous challenges facing the unification of policies across the globe could be addressed by:

- Collecting quality disaggregated data and the using of standardised methods of analysis to help guide and inform policy.
- Strengthening of health information systems.
- Developing unique, personalised indicators at the local level that feed into the national, regional and global level.

- Monitoring progress that would allow early interventions to be put in place.
- Establishing multidisciplinary and multi-sectoral partnerships and encouraging collaboration between organisations.
- Accepting trade-offs within sectors and in terms of the allocation of resources.
- Commitment and involvement of governments.
- Innovation and structures that build channels for dialogue and decision-making across government silos. Trainings, workshops, capacity building.
- Disseminating information on inter-sectoral governance and health equity in a way that is palatable to consumers.
- Forming networks with global institutions on an equal partnership basis.

Urgency for People at Risk and Marginalised Groupings (Health in All Policies/Migration in All Policies) (Prof Jo Vearey, University of the Witwatersrand (SAYAS))

The example of migration and different migrant groups was used to link the call for health in all policies. Because this call has not worked in every way, it is necessary to move beyond the health sector and include health in the policies of other sectors.

Health and migration become a 'melting pot of chaos' when put together because both are political and difficult to engage with in terms of policy.

A case study that explores the complexity of health and migration in the city (urban) argues that migration should be in all policies and taken into consideration in the responses to health systems, health, housing and other social determinants.

Approaches in Other Settings to Mainstream Health across All Sectors (Dr Fadzai Mutseyekwa, Zimbabwe Young Academy of Science)

The discussion on the SDH needs to move towards implementation. Several case studies that addressed mainstreaming health across all the sectors in a variety of countries were presented. Much of the information shared in the presentation was derived from the policy brief, Action across Sectors -#HealthInSDGs' (WHO, United Nations Development Programme (UNDP)), prepared for the 9th Global Conference on Health Promotion that would be held in China in November 2016.

Challenges that get in the way of efforts to mainstream health across sectors include the lack of political commitment, departmentalism, systemic misalignment of health and commercial objectives, insufficient understanding by other sectors and their objectives, and insufficient knowledge and capacity of the evidence-based approaches to mainstreaming health across all sectors. Recommendations that address these challenges include:

- Breaking down of silos in relation to government planning and financing.
- Taking on new funding strategies and finding synergies in financing for development.
- More engagement within the health sector and with other sectors.
- Bringing together the expertise, experience and capacity of civil society organisations and build alliances across social movements.
- Supporting the conversation around healthy policies through the media.
- Documenting best practice, efforts at mainstreaming health and formal research on processes.
- Developing standardised integrated population and health outcome data systems that work across sectors.
- Prioritising vulnerable urban settings.

Questions/Comments

Dr Michieka mentioned that trade-offs should be made within sectors and in terms of resource allocation. Another approach would be to look for cobenefits, which implies a different way of engaging in order to achieve goals and, at the same time, improve population health.

What is the benefit of mainstreaming health across all sectors?

- The 'silent approach' has been tried and there have been substantial gains in terms of outcomes over the years. However, the rate at which these gains occur can be drastically improved if the causes are investigated and addressed. This would produce a better return on investment because in the long term it will be cheaper to address prevention.
- Mainstreaming health is about sustainability and cost reduction, particularly because resources are finite.

- Business as usual does not work. Some of the successes and the remaining challenges are about the chain of causes. The SDH framework helps us to think about this aspect and take a population health approach instead of looking at the individual. It encourages us to engage with the complexity and try to address the macro issues, which cannot be addressed by individual sectors alone. We need people who do systems mapping to help us take a complicated outcome and work backwards to understand the question.
- Many researchers approach this issue from a public health imperative, which values health above all else and sees public health as a social good. We should start from that premise. This is not articulated and owned sufficiently.
- Mainstreaming health can be 'sold' to policymakers in a way that incorporating SDH into all policy decisions will curb health care expenditure in the long term, through preventative measures.

Why is health the most important thing? Why not environment, energy, food in all policies? How should this be addressed?

- All these are factors that contribute to human health, which can be seen as the umbrella that captures all the other factors.
- It is unfortunate that not many researchers are working on the human health aspect of climate change, for example.

There is concern about the sustainability of using cash payments as an incentive towards changing health outcomes in certain populations, mentioned by Dr Mutseyekwa, and about the idea of paying people to exhibit and practice good behaviour. It would be preferable to consider the reasons for the breakdown in certain behaviours in communities and promote optimal functioning through social cohesion with regard to handing out medicine in communities.

The evidence shows that the way the cash payment system has been piloted has yielded results. It should be seen within the context of an environment where other interventions, such as health literacy, are also taking place at the same time. This is a short-term intervention that has helped in cases where a population could otherwise not afford to travel to a health facility in order to access health care services, for example.

The transfer of animal diseases to human (or vice versa) plays a role in SDH and can be looked at through the migration lens. The concept of 'one health' has to do with veterinary medicine and human medicine working hand-in-hand because of zoonotic diseases and as a means of disease detection and prevention in humans.

The view that occupational health could be a social determinant of health was not necessarily supported in the broader social determinants lens because the workers are part of a system. Dr Michieka mentioned the problem of poor data. There is the notion that data are only as good as the people collecting it. Good quality data are essential.

The 'healthy health status' in terms of migrants moving to urban areas relates to both physical and mental health. There is a lack of response to the immense burden of disease around mental well-being, poor health and so on, possibly because people are at a loss to know what to do. Interventions and responses can be provided through SDH without having to label them as psycho-social interventions.

THEME 3

CONFERENCE STATEMENT

(FACILITATOR: DR TOLULLAH ONI, SAYAS)

Small Group Breakaway Discussions

Participants divided into two groups to discuss and give input to the draft conference statement on SDH.

Report Back

Changes made to the electronic draft document by the two groups were shared in the plenary.

Discussion and Conference Statement

It was noted that some participants preferred to have more time to review the draft conference statement and that the document should be explicit in terms of the parties responsible for the actions to be taken in response to the recommendations.

Dr Oni emphasised the importance of releasing the conference statement within the shortest turn-around time possible. The following way forward was agreed on:

The conference report would be finalised by 15 November.

- A small working group comprising Dr Oni, Dr Mutseyekwa and Dr Yeshak would ensure that the key points raised in discussion during the meeting were reflected and the input from the two groups incorporated in a working document.
- The final draft would be circulated to all participants for discussion with their relevant academies and in principle approval from the academies' leadership within 24 hours of receipt.
- The final conference statement, endorsed by the young academies across the continent would be released jointly by the young academies, possibly for publication in *The Conversation Africa*, and made available on the academies' websites by 22 November 2016.

Closure

Dr Oni announced that SAYAS and the Global Young Academies (GYA) would jointly host the next meeting of the Worldwide Meeting of National Young Academies in 2017.

Dr Oni thanked everyone for their participation in the workshop, which would serve to strengthen engagement across the young academies in Africa.



Gauteng Declaration on Social Determinants of Health in Africa

November 7 - 8, 2016, representatives from young academies of science (YAS) in Africa met in Johannesburg, South Africa. The YAS represented were from the following countries: South Africa, Nigeria, Uganda, Ethiopia, Kenya, Senegal, and Zimbabwe.

The workshop was organised by the South African Young Academy of Science (SAYAS) in collaboration with the Academy of Science of South Africa (ASSAf), the Nigerian Academy of Science (NAS) and the Uganda National Academy of Sciences (UNAS) with funding support from the InterAcademy Partnership for Health (IAP for Health).

The purpose of the workshop, was to deliberate on policy engagement on Social Determinants of Health (SDH) in Africa and interrogate shortfalls thereof. This was with a view to producing a statement with recommendations that will assist policymakers to formulate or implement policies that address social determinants of health in Africa in a holistic manner.

Participants in the conference agreed to the following statement of principle and purpose to share this statement with their young academies, academies and policymakers in their respective countries.

Health Equity and Social Determinants of Health

The World Health Organisation (WHO) defines social determinants of health (SDH) "as the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life".

These forces and systems include economic policies and systems; development agendas; social norms and policies; and political systems (Access: http://www.who.int/social_determinants/en/). These SDH negatively affect health as the poor are denied basic needs such as food, shelter, clean water, sanitation, proper clothing and have limited access to medical care, education and finance; resulting in health inequity, defined as the presence of systematic disparities in health between social groups who have different levels of underlying social advantage/disadvantage. Health inequity poses a major obstacle to improving population health and well-being. Accordingly, approaches to improve population health must include addressing these inequities in SDH and health outcomes.



Supporting Policy Statements

The African Union's Agenda 2063, Aspiration 1: A prosperous Africa based on inclusive growth and sustainable development, seeks to have a continent where:

- African people have a high standard of living, good quality of life, sound health and well-being.
- Well educated citizens and skills revolution underpinned by science, technology and innovation for a knowledgeable society.
- Cities and other settlements are hubs of cultural and economic activities, with modernised infrastructure, and people have access to all the basic necessities of life including shelter, water, sanitation, energy, public transport and ICT.
- Economies are structurally transformed to create shared growth, decent jobs and economic opportunities for all.
- Modern agriculture for increased production, productivity and value addition contribute to farmer and national prosperity and Africa's collective food security.
- The environment and ecosystems are healthy and preserved, and with climate resilient economies and communities.

The above aspirations are furthermore aligned to the following Sustainable Development Goals (SDGs):

- a SDG 1 End poverty in all its forms everywhere.
- b SDG 2 End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
- c SDG 3 Ensure healthy lives and promote well-being for all at all ages.
- d SDG 10 Reduce inequality within and among countries.
- e SDG 11– Make cities and human settlements inclusive, safe, resilient, and sustainable.

Barriers to Equitably Addressing Social Heath Determinants

Lack of policy coherence

The Universal Declaration of Human Rights asserts that "all people are born equal in dignity and rights". We believe that this situates heath issues as a matter of social justice. This approach is however not undertaken holistically in programming for populations across the continent.

Data limitations

Lack of data: In striving to improve health through addressing SDH, there is often a lack of population health data, against which one can measure the health impact of interventions on SDH. In addition, there are insufficient data on these social determinants, disaggregated beyond district to municipal level to facilitate municipal policy interventions. This is particularly pertinent as in many African countries, local government plays a significant role in providing services and infrastructure that directly relate to SDH. Beyond aeoaraphical disaggregation, there is also a need for data that can be disaggregated to better understand SDH inequity in vulnerable populations such as migrants, women, children, and the elderly.

Data quality issues: Even where population data is available through surveys, methodologies are often criticised for exhibiting different degrees of accuracy and reliability to inform programming efforts.

Incompatible/non-integrated data: in addition to availability of data, there is also the issue of compatibility as different sectors collect different kinds of information, quantitative and qualitative, using differing methodologies. In addition, across sectors, different indicators can be used to collect information on the same SDH, making integration of data challenging.

Need for contextual data: Collecting information on social determinants requires selection of valid indicators that best capture the data required. Whilst these indicators are often thought of as objective, often the social and cultural contexts within which they are collected can influence their validity.

Limitations in methodology

Working across sectors to address SDH requires working across different methodologies. This highlights the importance of applying mixed quantitative and qualitative approaches to address knowledge gaps.



Urbanisation as a curse?

In many countries in Africa and the Global South, the urbanisation process is rapid, and often unplanned resulting in a significant proportion of urban dwellers living under poor conditions. Across Africa, and in many other low and middle-income countries, whilst urban populations on average have better access to health services and are associated with better health indicators overall, these greas are characterised by significant spatial inequities in exposure to social determinants of health. In addition, this condition is exacerbated by factors of relative deprivation and spatial and environmental discrimination that accompanies vulnerability. It would therefore be important to examine the context of urbanisation in addressing social determinant challenges. In other cases, it has been shown that even when the health resources are available, living in urban areas doesn't guarantee the use of the available services. Beyond health resources, rapid urbanisation, with its associated stressors, is also changing the social structures leading to social exclusion; alienating people from their usual sources of psychosocial support. These social exclusionary processes occur across social, political, economic and cultural dimensions, influencing exposures to SDH and influencing healthseeking, risk behavior and ultimately perpetuating health inequity.

Curating history and lack of comparative studies in Africa

There is a general failure to capture and document best practice from Africa, including on indigenous approaches to addressing SDH and improving health. This natural capital of indigenous knowledge is often ignored and not harnessed as an engine for sustainable development. Furthermore, an absence of spaces that foster comparative research results in a lack of shared learning on best practices that apply indigenous approaches taking cultural dimensions into consideration to more accurately capture and intervene to improve social determinants of health.

Inability to scale up innovations in health

The call to utilise innovative solutions does not take away from the importance of indigenous knowledge. It seeks to find commonplace with entrepreneurial activities by young innovators especially and place these in the market place of solution seeking for SDH attainment. A key deterrent has been the inability to scale up innovations due to a lack of or access to funding; resulting in a proliferation of pilot projects of limited value at the population level.

Sub-optimal health systems

Health systems that fail to address the social determinants of health perpetuate health inequity. Poor functioning health systems are therefore barriers to access, often experienced by the poor and disadvantaged. Barriers to access are institutionalised in health systems through exclusionary practices by health care workers. Too often, health systems are limited to health care systems, which are more accurately disease care, with a focus on management of existing diseases. There is therefore a need for more comprehensive health systems that are cognisant of the importance of collaboration with non-health sectors that significantly influence health.

Specific recommendations proposed by the delegates at the conference include a call to:

Data and methodology

- Governments to develop health equity surveillance systems to address data availability and inter-operability; and to integrate and monitor health and SDH data/indicators in one system. This would provide a better understanding of health inequity and SDH in a given context; and would require inter-sectoral collaboration; as well as archiving and digitalisation of already collected data at sub-national, national, regional and continental level.
- Researchers to harmonise and be innovative in methodologies used for data collection including qualitative and visual methods in addition to quantitative measures.
- Researchers and data collecting processes to allow for disaggregation to better understand SDH inequity in vulnerable populations. In particular, gendered data, which explore the differences in how SDH factors are experienced by gender are required.
- Public health stakeholders to utilise collaborative approaches to
 working with local communities, governments and non-governmental
 organisations across health and non-health sectors in order to better
 measure social determinants of health. This would necessitate
 accessing of data sources outside of the health sector.
- Science academies across the continent to act as advocates to funders for research that requires mixed methods.

Urbanisation

National governments and municipalities to:

- Promote good urban planning for healthy behaviours and safety.
- Ensure participatory urban governance by encouraging public dialogue and involvement of communities in decision-making.
- Build inclusive age-friendly cities that are also accessible.
- Ensure spatial equity of basic amenities.
- Prioritise vulnerable groups such as immigrants, women, and children.

Health in all policies

- Researchers, institutions and science academies to build capacity to foster better science communication with policymakers and society.
- Governments (national and municipalities) to recognise the plural (health and non-health) systems within the society that influence health.
- Governments (national and municipalities) working with researchers
 to promote intersectoral collaboration for health. There is a need to
 explore case studies and best practices from similar settings; as well
 as to conduct research in the African context on how best to align
 economic and political goals with health goals and to incoporate
 health into all policies.
- Public health stakeholders to engage in advocacy for more intersectoral health funding opportunities outside of the traditional health sector channels which function in silos.

Scaling up innovation

 Governments to support health innovation and to partner with other sectors to facilitate scale up of successful pilot projects.

Shared learning across Africa

- Research institutions to promote documentation of best practises within the region in order to support shared learning from best practises and avoid repeating the same mistakes.
- Research institutions to support a better understanding of how indigenous knowledge and practices can be incorporated into

interventions to address health inequity, taking into consideration the social, cultural, and environmental factors that can promote healthy behaviours, access to primary health care, and ultimately influence health outcomes.

This statement has been endorsed by the following Young Academies of Science:

- South African Young Academy of Science (SAYAS)
- Zimbabwe Young Academy of Science (ZIMYAS)
- Nigerian Young Academy (NYA)

APPENDIX 2 _____

WORKSHOP PARTICIPANTS

Title	Name	Surname	Organisation
Prof	Jo	Vearey	South African Young Academy of Science
Dr	Tolu	Oni	South African Young Academy of Science
Dr	Mariamawit	Yeshak	Ethiopian Young Academy of Science
Dr	Fadzai	Mutseyekwa	Zimbabwe Young Academy of Science
Dr	Michieka	Okiago Michieka	Kenya National Young Academy of Sciences
Ms	Belinda	Nabukalu	Uganda National Young Academy
Dr	Papa	Diop	Académie Nationale des Jeunes Scientifiques du Sénégal
Dr	Olufunke	Fayehun	Nigeria Young Academy
Dr	Christopher	Akinbile	Global Young Academy
Ms	Janine	White	University of the Witwatersrand, RSA
Mr	Tackson	Makandwa	University of the Witwatersrand, RSA
Mr	Mphatso	Kamndaya	University of the Witwatersrand, RSA
Dr	Oladoyin	Odubanjo	The Nigerian Academy of Science
Prof	Voster	Muchenje	The Academy of Science of South Africa
Ms	Marvin	Mandiwana	The Academy of Science of South Africa
Ms	Edith	Shikumo	The Academy of Science of South Africa

