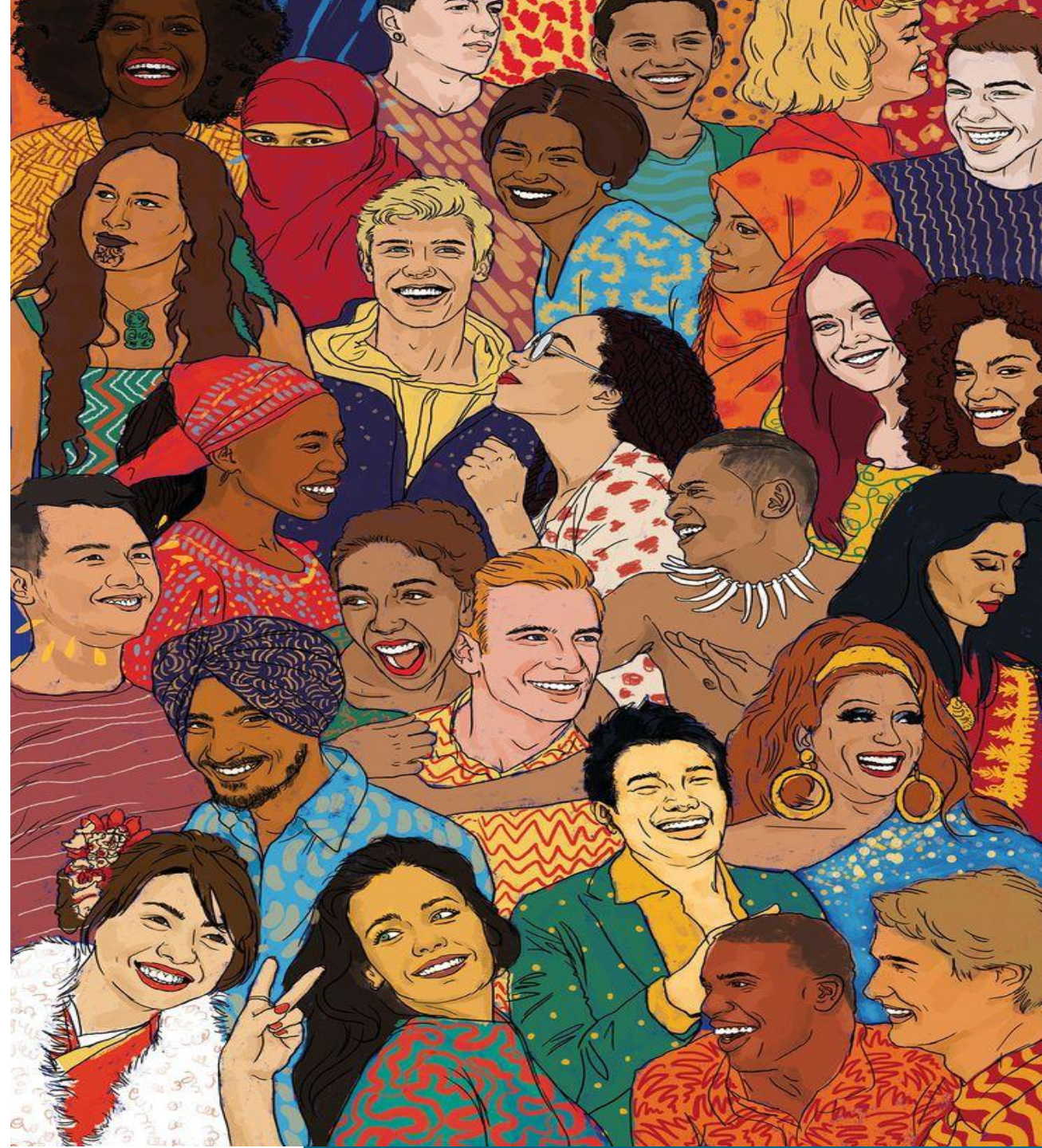


Diversity and equity in science communication

By: Verah Okeyo




Objectives of today's session



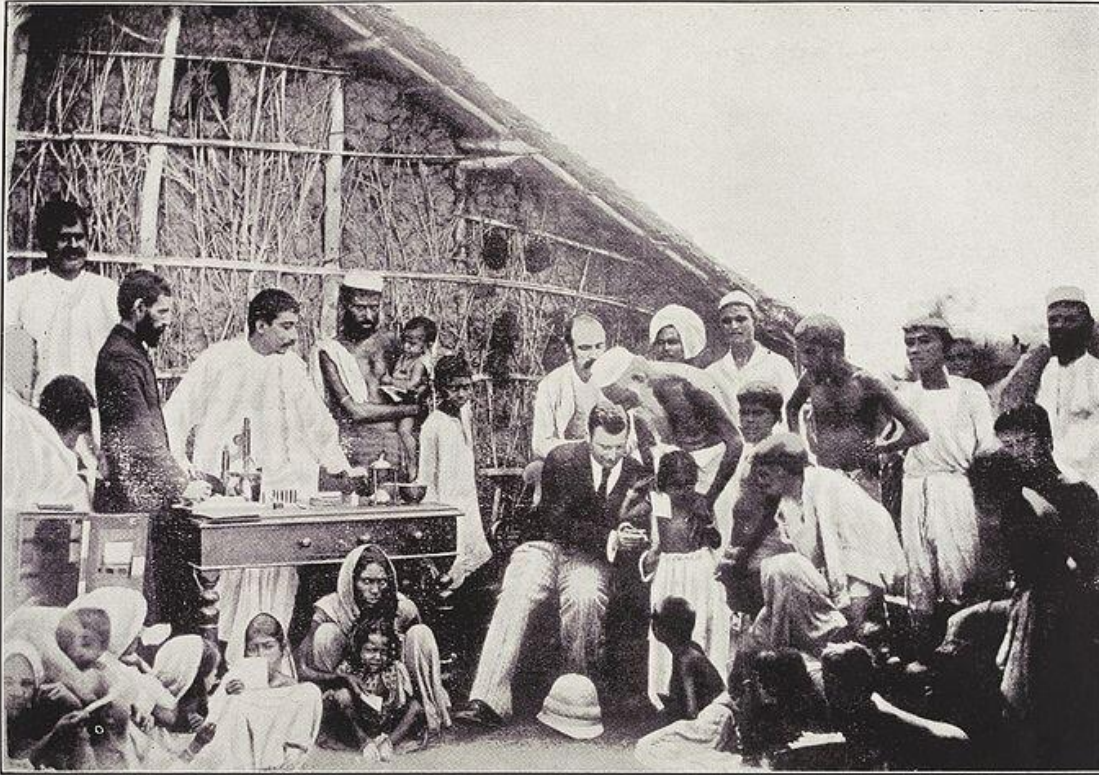
1. Is there a lack of diversity in science communication and journalism?
2. If yes, what are the ways that journalists can participate in counteracting the lack of diversity?
3. Questions..



Is there a diversity problem
in science communication?



Minority groups face structural challenges and inequalities when it comes to participating in science, through either informal or formal means [Ottinger and Cohen, 2012] partly because they are not white, heteronormative, able-bodied men. Science communications and journalism perpetuates these inequalities



DR. G. N. MOOKERJEE, Medical Inspector, Calcutta.
DR. JOGENDRA NATH DUTT, Analyst to the Health Officer.
DR. R. SEN, Assistant Health Officer.

DR. W. J. R. SIMPSON, Health Officer of Calcutta.
MR. W. M. HAFKIN.

(To face p. 35.)

The founding and development of LSHTM not only coincided with British colonialism but was a direct consequence of it. LSHTM was originally not designed as an inclusive institute for people of colour or to benefit their health. *Dr Lioba Hirsch, author [The LSHTM and Colonialism - A Report on the Colonial History of the School \(1899– c.1960\)](#)*


THE LONDON 134
SCHOOL OF TROPICAL MEDICINE,
Connaught Road, Albert Dock, E.,

IN CONNECTION WITH THE
HOSPITALS of the SEAMEN'S HOSPITAL SOCIETY.
(Under the Auspices of Her Majesty's Government.)

It is the “white man’s burden” to introduce modernity and civilized governance in the colonies.

Let's start with a few of the issues of science first...

1. Science has thrived on the back of indigenous communities who interacted with science only through violence and over the years science has not made an effort to address their fears (Tuskegee, Cameroonians and Trypanosomiasis vaccines, sterilization for women in India).
2. Science education is only for those that can afford it, and to specific schools of repute
 - › In Africa, students who can only afford to be in rural schools are hampered by a lack of good science teachers and lab facilities, and are unaware of opportunities to enter mainstream science
 - › Many rural students are also hampered by their poor English, the language that schools often use to explain science. Teachers from elite colleges and interview and selection committees are often biased against such students
3. Scientists in the global south continue to earn less than their north counterparts
4. There are still more men in science than women
5. Demographically underrepresented such as women, people of colour innovate at higher rates than others but their novel contributions are discounted and less likely to earn them academic positions in their work
6. There is little funding for issues that affect the global south (they are called neglected tropical diseases for a reason)
7. Funding comes to a white researcher/organisation who recruits a scientist/organisation from the global south, or of colour to do the work
8. Publishing in journals is expensive for scientists with little funding from the global south

An illustration featuring several microphones and recording devices. At the top, there are three microphones: one with a red and grey body, one with a silver body, and one with a black body. Below these, there are five hands holding different types of microphones and a smartphone. The hands are colored in various shades: teal, brown, dark blue, green, and red. The background is white.

What role does science play in the diversity , or lack thereof, in science?

Science and the reporting/communication of it, thrives in inequalities that are already present in our society, playing into class.

The two fields perpetuate the inequality by making sure the world believes the inequality is the norm through storytelling

Communications specialists and journalists are excellent storytellers and they weaponise that gift

WHY STORIES MATTER

WITH JACKIE WONG · MEGAPHONE MAGAZINE



“The human ability to tell stories is what differentiates us from other animals and led to the success of our species”—Yuval Noah Harari

An illustration featuring several microphones and recording devices. At the top, there are three microphones: one with a red and silver body, one with a silver body and a black boom arm, and another with a silver body and a black boom arm. Below these, there are five hands holding different types of microphones and a smartphone. The hands are colored in various shades: teal, brown, dark blue, green, and red. The devices include a black handheld microphone, a silver handheld microphone, a black handheld microphone, a silver handheld microphone, and a smartphone with a screen showing a play button icon.

Approaches to science communications and journalism

What approaches are there in science communications and reporting and which one foster diversity and equity?

science communications and journalism perpetuate the lack of diversity in science by...

1. Representing science through white, ableist and patriarchal lenses
2. Packaging the information in a way that it excludes the minority- writing only in English, asking people to access information through a QR code or website when not everyone has internet access
3. Producing culturally irrelevant material
4. Any exercise to diversity and include people is tokenistic, a show of good will and corporate speak.
5. Holding engagement meetings in places people cannot access- They have to pay or drive
6. Journalists only quoting men, leaving women out
7. Communicators and journalists always subjecting themselves to “support role” taking instructions from scientists, never advising them how their ivory towers exclude people.



There are consequences to communicators and science journalism playing favourites



Science journalism and communications play roles like:

- Combat misinformation
- Garnering public participation in science
- Fundraising
- Policy engagement
- Project management
- Public education about health, climate change and what affects people's lives

Given the role of science communications/journalism, certain populations end up damned to poor economic and health choices (like refusing vaccines). A lack of diversity lessens the impact science has in society, and even lower funding

So what should we do?



1. Recognise and acknowledge the colonial, unequal history that the institution and the field you work for- look at gender, sexual orientation, religion, age, class, race etc
2. Look at how those biases affect how you communicate/report about science
3. Check the organisation's DEI policy and adhere to it. If there is none bring it to their attention with a clear case of how the lack of diversity is hurting the organisation/craft/science
4. Redefine who an expert is
5. Draft a communications strategy that would do things differently?
6. For journalists seek diverse source
7. Put a monitoring and evaluation plan to judge how you are performing in the DEI activities
8. Actually do things differently, seeing to it that takes into account community's intellectual assets (how they make sense of the world, their knowledge base, their culture...)

Science communication/journalism models

Model 1: Science Literacy (Secko, Amend, & Friday, 2013)

- Giving the public information that they need to make their day to day life decisions because there's a perceived lack of knowledge of science (Amend, Capurro, & Secko, 2014)
- Science is fixed, certain ...” objectivity”
- Scientists gives knowledge to journalist/communicator translate to the lay public
- Criticised for lack of context, failure to connect scientific information to personal relevance, uneven power relations between those viewed as having knowledge (science) and those that do not (audiences), and ignorance of other forms of (non-scientific) knowledge.



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Model 2: Contextual model

- Accepts science means different things in different geographic and social locations
- People get information in particular contexts that shape how people process and respond to that information
- Journalists constructs messages relevant to particular audiences while paying attention to the needs and situations of these audiences.
- Good method to maintain a more cooperative relationship between science and the public
- Empowering “the audience” as being able to quickly learn what they are told

Science communication/journalism model...

Model 3: Lay expertise model

- Includes local knowledge/ “lay-expertise’ of specific populations
- What you are communication is valued in its own right, and weighted through other social systems
- Accepts science is limited and uncertain, and ever in need of “expertise” from sources outside of science to examine issues
- useful when covering issues related to farming since “scientific issues are not solely scientific” and that “laypeople might have ‘as much to learn as to communicate’”
- Audience participation and engagement is encouraged
- People not only ask to be answered but, local communities by fostering confidence that individuals have valuable knowledge to share and can participate in the scientific process



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Model 4: the public participation model

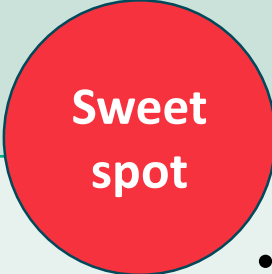
- Science and scientific process more interactive, encourages public debate on science
- Actively engaging stakeholder groups in the science communication process to improve communication and trust among these groups
- Non-linear transmission structure present in mainstream journalism, democratized, public participation in the scientific process especially regarding policy issues
- Creative, experimental, educational and democratic functions as it bridges scientific and cultural.

Which model works best?

Deliver information	Public engagement
<ul style="list-style-type: none">• Seeks to translate scientific information to public• Seeks to fill a certain gap• Top down method of communication	<ul style="list-style-type: none">• Acknowledges science's shortcomings• Values knowledge outside of science• Interactive and empowers
<ul style="list-style-type: none">• Ties science to certain audiences• Agrees that science means different things to different people, still a top down model	<ul style="list-style-type: none">• Views science as part of the society• Makes science open to all• Interactive and empowering

Which model of the four works best?

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A few examples of my own to maintain diversity and equity

How did I ensure diversity in my three jobs as a journalist, communicator and teacher?

	Startup phase (planning)	Implementation (doing)	Closeout (analysing impact)
Comms	<p>Asking questions like where is this research being conducted? Who will interact with this work (personas)? What would be their needs? What would they consider a win if this project succeeds</p> <ul style="list-style-type: none">-Communications plan-Making collateral for all the personas in a way that they can interact with it (project briefs)-Meetings for co-creation	<p>Doing the work while keeping in mind what we agreed upon in the start up phase.</p> <p>Reporting every move back to the organisation and the audiences I felt were often left out.</p>	<p>Reporting on impact of the project back to the people and asking them whether we met the needs they expressed in the beginning (success stories)</p> <p>Reporting that back to the organisation.</p>
Journo	<p>Look at previous stories to know who has been quoted, what questions were answered, keep an excel sheet of monitoring who I quote on each story</p>	<p>Seek out new faces to quote, new angle</p>	<p>Publish on multiple formats, each with its own style</p>

Assignment time!!

So in your groups, please

- Pick an organisation where one of your works, or an imaginary one
- Diagnose the diversity challenges
- Strategise a plan how you will address any diversity issues
- Share with us

**Thank
You**