



Transcript- Diverse Voices: Internationality and the Health of Women, January 2024

Note: Audio description for screen text not verbally said is included in brackets.

Elizabeth

Hello, everybody, and welcome to today's webinar. [Graphic Medicine, Thursday, January 25, 2024, 3-4pm EDT. Facebook/NIHORWH, Twitter @NIH_ORWH, nih.gov/women, #ResearchforWomen.]

My name is Elizabeth Barr and I'm a program officer [Social and Behavioral Scientist Administrator] in the Office of Research on Women's Health at the NIH. Welcome to today's webinar. ORWH's virtual speaker series titled Diverse Voices Intersectionality and the Health of Women disseminates research findings that are relevant to diverse groups of women and that incorporate a multidimensional intersectional focus on sex or gender.

The speaker series aims to increase public awareness, understanding and engagement with research relevant to diverse populations of women. It also seeks to highlight work by investigators who have received funding from ORWH or are affiliated with the Office or utilized an intersectional or multidimensional framework.

The agenda for today's session is shown here. [Welcome, Elizabeth Barr, Ph.D., ORWH/ Speaker Introductions, Miya Whitaker, Psy.D., ORWH/ MK Czerwiec, R.N., M.A./ Whit Taylor, M.P.H./ Annia Burns, Ph.D., RD ORWH/ Closing, Elizabeth Barr]

Today's meeting is being recorded. All registrants will receive a follow up email with a link to the recording, as well as information about subsequent sessions of the Diverse Voices Speaker series. We have live-captioning available today. If you need captioning- go ahead and click on the closed caption button in the zoom menu bar at the bottom of your screen to enable captions.

All participants will be muted during today's event. Please enter any questions that you have for our speakers using the Q&A feature.

I will now pass the virtual microphone to my colleague, Dr. Miya Whitaker, who will introduce today's speakers.



Miya

Good afternoon, everyone. My name is Dr. Miya Whitaker [Health Scientist Administrator, NIH, ORWH]. As my colleague Elizabeth just said, and I'm going to be introducing our speakers today. MK Czerwiec is a nurse, cartoonist, and educator. Her clinical nursing experiences are in HIV AIDS Care and hospice care. MK has published comics under the pseudonym Comic Nurse since 2000. She is the creator of the graphic memoir "Taking Turns: Stories from HIV AIDS Care Unit 371" and editor of the two-time Eisner Award winning "Menopause: a Comic Treatment," and a co-author of "Graphic Medicine Manifesto."

MK regularly teaches graphic medicine at Northwestern Medical School, the School of the Art Institute, and the University of Chicago. She has served as a senior fellow of the George Washington School of Nursing Centre for Health Policy and Media Engagement, and as the artist in residence at Northwestern Feinberg School of Medicine with Taylor is an... I apologize about this in advance, but Agnus, I'm sorry I can't pronounce that word, but award-winning cartoonist editor and public health educator. Whit has a B.A. in cultural anthropology from Brown University and an MPH in Social and Behavioral Health from Boston University's School of Public Health.

Whit's Comics have been published by the NIB, The New Yorker, The Washington Post, Little Brown Young Readers, and the Red Radiator Comics, Silver Sprocket, and others. Whit Taylor and Joyce Reiss as a public Health history, graphic novel "The Greater Good" will be published first by the first second in 2015. My apologies about that. I will now pass the virtual microphone over to MK. MK, the floor is yours.

MK

Thank you very much. And I'm going to share my screen here. That's okay. And hopefully that's coming through. All right. Looks great. Thank you.

Thank you very much. I am absolutely thrilled to have the opportunity to speak with all of you today.

So quickly, what I'd like to discuss, I'll outline here is who am I and how did I get to doing this crazy work of using comics in health care. A quick introduction to graphic medicine and how it's being used, and then how can comics help to conduct and disseminate research.



This is my elevator pitch. When I talk to people about what it is I do, it's that I'm a nurse who uses comics to contemplate the complexities of illness and caregiving. As was mentioned, these are the books that I was a part of creating. ["Graphic Medicine Manifesto," "Menopause, a Comic About Treatment"]

I'm very proud of all of them, but I'm most excited about the anthology of comics about menopause, because I think they really demonstrate one of the great things' comics can do- which is just to help dispel stigma and to talk about things that we have a hard time talking about. The fact that this book is called "Menopause," and then it won an Eisner Award, which is kind of one of the Oscars of comics, and that it was a "New York Times Best Of."

It got people to say the word menopause a lot more times than they would have that year. But also, because so much of what I found out in popular culture about menopause was so offensive to women. And I said, "we need to do better." And this is a collection of comics that do better. I'm very proud of that and all the work I've been able to do through graphic medicine really, this is why I'm here.

My work attempts to use the medium of comics, which I find incredibly powerful, to help make challenging situations somewhat easier for patients and families. If you're interested in finding out later more about my work, my website is ComicNurse.com.

I started making comics... I was not the kid at school who could draw, but I started making them while I was working as a nurse on an AIDS unit at the height of the AIDS global epidemic.

One of the things is in nursing school you don't get taught- how to deal with a lot of the difficult loss and pain and, secondary trauma that you experience as a health care provider. Rachel Naomi Raymond, who's a physician and a chaplain, she wrote, "expecting to see the kinds of things that we see as caregivers and not be impacted by them is like expecting to walk through water and not get wet."

Yet, unfortunately, a lot of our professional education for physicians and nurses and allied health professionals doesn't really cover a lot of that. I was really struggling to figure out how was I going to cope with so much loss and be present to my patients rather than caught up in my own grief. And what came as an enormous surprise was that I started making comics and as I said, I was not the kid at school who could draw.



You can tell... I don't expect you to read these. Just looking at these very early comics that I used to process clinical experiences. [series of comic panels with simple drawings and dense text.] Part of why I think that worked is because in a comic I would just start here [despair, confusion, overwhelmed] and by going through just a number of boxes, pairing image and text sequentially, I would find myself here [hope and clarity].

And this was the most effective thing of all, the sort of self-care things I could do to help me get through that difficult time and to continue to do this after I finished my clinical time and I thought about maybe doing other work, I suppose I knew I wanted to focus on comics and I was very curious like, why did those comics help?

How can stories help us heal? Rather than learning how to draw- because I kind of like my goofy little childlike style- I decided that I would actually study the field of health, humanities or medical humanities so I could think about the and learn from scholars who have actually thought carefully about that question: "How can stories help us heal?" [Medical (Health) Humanities and Bioethics, Northwestern Medical Campus]

I wanted to put all that work very to work in my comics, but I wasn't talking about that in my education. I wanted to be taken seriously. So I was, of course, using scholarly terms and articles and everything until I came across this book ["Mom's Cancer" by Brian Fies] at the Museum of Contemporary Art in Chicago in their bookstore and I remember thinking, my God, that is an image I am very familiar with clinically. I have never seen it on the front of a book. What is this book? [Book cover- a cartoon drawing of the profile of a woman without hair, slouching with an angry look on her face, in a pajama shirt and a bandage on the back of her neck]

This book was done by a man who's a science writer, but also a very skilled cartoonist. He just told the story of his family's encounter with his mom's cancer. And I remember looking at this and thinking all the things that I think become barriers between patients and families because we don't see what happens at home. We don't see the big picture of what their life is like. I'm able to see them through this book. Are there more out there like this?

Well, it turned out in the U.K., there was a doctor who also come across this book. He ran across it in the Tate Library in London, but he was also working on a degree in medical, humanities and bioethics. And that's Ian William's and he coined this term graphic medicine to refer to these kind of non-fiction comics in book form that are doing the work of telling patients and families stories from their perspective. And he set up this website, GraphicMedicine.org to catalogue



some of those books. He defined this term graphic medicine to refer to the interface between the medium of comics and the discourse of health, illness, disability, and caregiving and just breaking this down.

It's basically comics about how we think, about how we deliver care, how we receive care. What is it like to live with a condition, a disability and caregiving, an illness. And all of those things as they express themselves in comics, were what he was really interested in and fast forward 15 year and more. We have a website GraphicMedicine.org that he started- has developed and expanded because this field has exploded. It was really just having gotten a few people together who thought this is a possibility, this should be taken seriously. And thousands of people throughout the world have agreed. And so, this has really been an explosive field.

It's really exciting. I want to just take a step back and define the term of a comic as I'm thinking about it in this context. This is my definition. Many comic scholars disagree, have very different ways of thinking about it, but I think of a comic as sequential art that conveys a narrative and often incorporates text-

So, you have image, image, image. The gutter is a space between panels in a comic, and it implies time, and our brains instinctively work. It's really fascinating. There's some fascinating research out there about there the ways that our brains instinctively will assemble these images into a story. Even just looking at that panel, we could all come up with a story of what's going on there [four panels, first panel single stick figure, second panel two stick figures, third panel figures hold hands with text "love you!," last panel figures are separate- one in the distance].

It's really fascinating. And so, what exactly is graphic medicine as it's out in the world? Well, part of it is we look at these graphic memoirs of experiences of illness, disability, and caregiving that, again, have exploded since the time of "Mom's Cancer." Here's another terrific early example. This is a book called "My Degeneration," about by a young man living with Parkinson's.

What he does in this book is makes the visual metaphors that we think about what happens in our bodies, in our illness, in our caregiving and in our health. Literal right... in comics, you become the master of space and time and so you can make anything happen. And so, he does that in this work that's useful and helpful.

Again, for particularly for family members of someone who's going through this, caregivers, etc. Another great example is a book by Ellen Forney about manic depression. And in that book she does amazing work. But one example is this terrific metaphor she uses to show us what it's like to be cycling between mania and depression. Just imagine the





amount of text it would take to describe this, but how efficient the gestalt of this image is. [cartoon of a carnival carousel depicting 8 stages between mania and depression. Begins with mania- person on horse is frantic with words “up, up, up! Up! Up! Up.” Second person on horse titled hypomania “up” with a smile and horse moved quickly. Third hangs from the horse while it moves quickly with a frown labeled mixed states “up and down at the same time.” Fourth clings while the horse goes up and down wildly titled rapid cycling “4 or more episodes within 12 months.” Fifth person titled euthymia “balanced ‘normal’ state” sits happily horse moves evenly and person holds brass ring. Sixth titled dysthymia “chronically low” horse is not moving person is slightly slumped with frown. Seventh titled mild depression “low” person is more slumped, horse does not move. Last titled depression “low, low, low, low, low” horse is no longer suspended and sits on the ground with the person curled up underneath it.]

Just it's right there, right? You feel it. And there are so many great examples in these books and there are thousands of these books. Here are nine books just about the process of getting pregnant, trying to get pregnant, perinatal loss, postpartum depression, and infertility. Just all these things are just nine titles. And there are more out there that I could show you just about reproduction. [book covers on screen: The Shiniest Jewel, One Good Egg, Baby, Kid Gloves, Waves, New Life, The Facts of Life, Dear Scarlet, and Pregnant Butch.]

Here are a number of titles are meant for young adult readers that cover topics like disability, anxiety, GI disorders, end of life, the transition of changes in your body in adolescence, bullying, substance abuse in the family and all these topics are covered in these texts for young adults. [book covers on screen: El Deafo, Guts, Ghosts, Wait, What?, Hey Kiddo, Fights, and Go With the Flow]. There are a huge number of books around cancer, and these are just a few examples. [book covers on screen: Cancer Vixen, Mom's Cancer, Relatively Indolent but Relentless, In Between Days, Cancer Made Me a Shallower Person, and Kimiko Does Cancer]

Same with mental health issues and issues that are outside of the clinic and outside of the hospital are very important to us as well, because anything that impacts your mental and physical health, it can be a part of graphic medicine. [book covers: Marbles, Rock Steady: Brilliant Advice from My Bipolar Life, Anxiety is Really Strange, PTSD]. These are a few examples about police brutality, bullying, racial injustice, war, migration, and climate change. [book covers: Your Black Friend, APB, Fights, Escaping Wars and Waves, Warmer, Climate Changes]. And so, I just want to make it clear the topics that are not necessarily hospital based or health care clinic based are definitely part of what we do.



But this is the core of it for me, why I advocate for graphic medicine. And this is a panel from the “Graphic Medicine Manifesto” [Penn State University Press, 2015] that those best positioned to represent illness and caregiving are those living with it. And that’s the motto of the disability rights movement. Nothing about us without us. And that’s important to me because I really believe that as a caregiver, we’re not the people who are the authorities on their care are the people living with the illness and their families.

That’s unfortunately not how medicine has been organized. And I love for graphic medicine to be a part of the change because in these texts, in these books and we read them in medical schools, nursing schools, support groups. As people read these books, the people living with it become the authority on that care, and that’s really powerful.

I mentioned that I’m going to talk a little bit about the ways comics are being used in health care today, and I’m going to focus on a few areas: education, reflection, research, and advocacy. And when I say reflection there, I’m also incorporating not just reading these comics, but actually making them as well.

Using the power of drawing as a way of knowing in a reflective tool.

I’ll start with education. I really believe after using comics as an educational intervention and of course this is not the beginning of it. Public health has been using comics for a long time, particularly during wars and crisis. Comics are great teachers, especially when there is a high density of information. There’s a lot that you need to know.

It’s really important that you learn the information, so there’s a high level of importance to the information and you’re in a high stress situation. Of course, my medical students will say, that’s medical school. We should be doing medical school through comics. And I don’t disagree necessarily, but also think about being diagnosed with cancer, right? You have to suddenly learn all the pathophysiology of the cancer that you have. You have to learn about your treatment options. It’s really important that you understand the basics of all of this. But we all know we don’t learn well when we’re stressed out. Hence comics, right? This intervention that can transcend language barrier literacy challenge and bring this visual attraction and appeal to the information that you need to know in a stressful situation.

And the other piece that I haven’t called out here is the sequential nature. One box at a time, one tiny piece of information at a time that builds on itself. And then comics, of course, can also be low cost and low tax. They can be a really efficient intervention in situations of crisis and maybe lack of funding or whatever. [comic on how to safely evacuate a plane]



We certainly saw those during the AIDS crisis, and we also saw it again, really re-emerge during COVID. Here's a terrific example I like to use. This is Alex Thomas, who's a pediatric allergist and immunologist, and he and his partner created something called "Iggy and the Inhalers." Alex was a kid with asthma who thought it was really unfortunate that the two inhalers were not clearly labelled. "This is your rescue inhaler to use in an emergency and this is your maintenance inhaler that you use once a day." They're not standard notifier labelled or anything like that. So, these characters he created on the far right there is "Coltrane the Controller" and behind him is "Broncho the Bronchodilator." And through using these visual metaphors and the powers that these characters have, the kids that researched this at asthma camp in Wisconsin came out with a pretty sophisticated understanding of not just their asthma, but also the pathophysiology of their asthma, but also the pharmacology of their medications.

Then the characters themselves are used as stickers on those inhalers to help them keep with that plan. The success of this has him and his business partner, moving into a wider range of comics projects that are not necessarily aimed at kids, but adults on very serious topics that we all need to learn in a way that we can manage when under stress and dealing with difficult circumstances.

I could give an entire lecture on educational comics, but I'm going to move along to the next topic here. [family reflections, informed consent, CAR T-cell therapy]

But before I do, here are a few texts that have started to come out that are really focusing on areas. [book covers: All that Remains, Anxiety is Really Strange, Graphic Public Health, Looking at Trauma, Clinical Ethics]. And I know my colleague will be speaking more about graphic public health, but then there's a book at the bottom about using comics and drawing with people who have experienced trauma and in bioethics and kind of doing the work of the fields that we are in using this medium.

Each field has its own way of using the medium that's really powerful. I mentioned comics as a reflective tool. Andrew Kantrowitz is educational as a Ph.D. in education, but also a fine artist. She created this beautifully drawn book called "Drawing Thought," and she says, "drawing is a way of constructing ideas and observations as much as a means of expressing them when we're not ready to or able to put our thoughts into words, we can sometimes put them down in arrangements of lines and marks."



This is something that within graphic medicine we've really come to lean on as an incredible tool in patient family support groups, educational interventions. I can show you two examples here. One was that I was invited to New York to work on a project to get people to talk about their end-of-life care wishes long before they need them, which is when we should be talking with our patients and our families.

I said I would do a workshop getting them to draw about this. Here's a table of adults with crayons, drawing what the prompt was, "draw a good death," and they very much engage with this and some of them had family members there and one woman joked, "I'm just going to give my family this drawing and tell them, get me as close to this as possible." Because they're basically expressing their values, their wishes, who they want, there who they don't want there- all the things we ask people to fill out forms about. Can they actually be done really powerfully in a drawing. And so, this was a really wonderful way I've used comics and drawing as a way to do important health care work.

Another example is I use these this kind of an approach with my medical students. I say to them, "Draw a clinical encounter," and these are first year, second year medical students. You'll notice I don't say that- you've been in. I don't say- this is real. I don't tell them- this is theoretical. But what's really fascinating is when you do these exercises, what needs to come up, as Andrea Kantrowitz says, you don't yet have the words for, it tends to come out.

This is a first-year medical student saying, you know, I'm really struggling with this... and the conversations that we have around these drawings as we get up and put them under a projector and we talk about these drawings, we have really important conversations about the things they're experiencing. So, these are just two examples of how drawing can actually be so helpful for us.

Here's another wonderful example I like from my colleague Michael Green at Penn State. He created this project "Let's Talk" with a therapist and social workers, and it's basically a zine, a little booklet that people are given, family members are given, before they're about to have a meeting, you know, days before they're going to have a meeting with the care team about their loved one who's in the ICU.

And presumably... Michael's a bioethicist... presumably, they're facing some difficult decisions and we do these conversations all the time, but we never really think about like giving the opportunity to prepare themselves. I just love this project, having been in these kinds of situations. So again, it's very basic kind of hand-drawn zine, and it's gives them the opportunity to explain how they [hand illustrated boxes with the following prompts to be completed]



understand the situation, what the doctors think and what they think the prognosis is, and the opportunity to say like, you know, I don't know, no one's ever explain this to me.

Here's another one that really prioritizes their concerns. [hand drawn box with following prompt.] What are you most worried about? I want you to kind of write this down or draw or respond to this prompt so that we can have that information. And you're not just going to feel overwhelmed by what we're talking at you in this meeting. It's another opportunity for them to actually give their feedback about the care that they're getting. [illustration with prompt: "Tell us how we're doing so far... Has the medical team been helpful? How would you describe your experience" with a best to worst scale. Best being "we love our doctor" ... meh... worst "we've been waiting for hours for an update" and a comment box to say more]

But then finally, again, as an ethicist, he's getting them to sort of that. These are just a few pulled out pages of excerpts. This is a whole cute little like maybe 10 – 15 page booklet that focus on their values, and let's think about the values we're going to use as we have this conversation and talk about care. [illustration with icons for family, community, work, friends, intimate relationships, parenting, health, leisure, civic engagement, spirituality, personal growth, something else]

That's another wonderful part. But again, I could spend a whole lecture on just how we use drawing and reflection, but I'm going to keep moving along. So, let's focus on research. I want to talk about three ways we are using graphic medicine in research. First is as the intervention, second is for data collection, and then third is for data dissemination.

And I'm sure there's more out there, but this is kind of how I'm thinking about it right now about ten years into doing this aspect of it. Here's an example of as the intervention. So, this is a pediatric clinic at the University of Chicago, and the care team was feeling like patients were reporting that they felt that the computer was really impinging on the care that they and their family were getting. The doctor spent more time having to look at the computer than at them. So, we created this very simple ABC approach to let them know what their rights are- that they have the right to ["A"] ask to see the screen so that we can look at it together and then "B," you can become involved. You can look at the screen and say, yeah, no, I'm not taking that medicine anymore. And the doctor can say, okay, great, we're going to take that off. Then finally ["c"- call for attention, if you have something sensitive to discuss, speak up and ask for your doctor's full attention.] they can actually ask the doctor to step away from the computer.



So, they're given this handout on cardstock in the waiting room, so they have an opportunity to consider it. And then the team that did this research, I did that comic and then the team did research, and they had some really good outcomes from it. [screen shot of the JMIR Publications website.] It showed that a few months out many of the patients and families almost 100% remembered the comic, but about half of them talked about they could actually name one of those interventions. And if you think a few months out, that's pretty good. And then they actually reported that they had started doing some of those things in subsequent visits. That was really exciting. So that's the comic as the intervention.

Moving along about using a comic for data collection. There's two ways I'm thinking of it here. One is a study where you'll recall the book I mentioned "My Degeneration." My colleague again, Michael Green at Penn State, he actually had neurologists who care for patients and families with Parkinson's and their staff- the nurses and the office staff- read this book by a guy with Parkinson's, Peter Dunlap-Shohl. And look at the ways in which he actually wonderfully depicts caregivers because we show up as characters in these books and the metaphors they're using. And he then did a study to kind of say... got them together, did a focus group and said, what did you learn?

And when they published this [screen shot of "The Permanente Journal" website], they said, after reading this book, the confidence in understanding their experience of their patients increased significantly. I always tell my medical school students, when you read a book about by a patient with Parkinson's, you're not going to know what it's like to have Parkinson's. But I would hope you're going to ask more informed questions. And again, elevating the voice of patients and families. So that's another great way of using it for data collection.

And then another thing we can do as data collection, of course, is if we have our support groups, our family members, the women in our studies, if we have them make drawings or comics about their experiences, we have a workshop, for example, and we all make a comic or, you know, I do with my students.

I've been doing this for about 15 years now. I have a lot of these kind of comics of drawing and intervention. We can pull data from this, right? What are the themes that come up? You know, the one on the left there you see is the ways in which, you know, the pain. Those are two hands coming together at the encounter. [external factors: politics, family, insurance, food]



But we see the ways in which things external to the encounter are impinging on that encounter or the way that these are two very similar ones where the student feels that they are so kind of dwarfed in the present of the patients that, you know, they want to do a good job for, but they're just little, you know, So we could get data from this, right?

We can say, everybody kind of drew that they're feeling really isolated. So that helps us focus our research. And there's a guide to thinking about this stuff. Chapter five in a book called "Research Methods in the Health Humanities," my colleague Muna Al Jawad and I actually codified some of this in how to look at drawings like this and think about how to pull data from them. There are some tips in this text if that's of interest. And moving right along. I'm getting close to my time here.

The last piece here is data dissemination as translation. We've all heard of you're looking at a research study and creating a visual abstract. I like to think that charts and graphs are static and those are great to include in our studies. But the thing about comics is they're actually active. We've got one panel and then. And then. And then. And then. And they can actually be pretty effective.

Here's a wonderful example of a comic that actually disseminates data. [example of comic depicting randomized controlled trials]. It is very true to the study. So, I've talked about the areas where comics are being used in health care.

And for this last area at area here, advocacy, I would just be showing you the work of our next speaker. And so, in addition to talking about comics and advocacy and much, much more, I'd like to hand it over to my colleague, Whit Taylor.

Elizabeth

MK, thank you so much. That was fabulous. And I just wanted to tap in and thank you before Whit takes over.

Whit

Hi, everyone, MK that was wonderful. Thank you. And thanks to ORWH for having me.

Let me share my screen and we will get started.



So today I'm going to be talking about comics for health communication. I'm just going to give you a quick overview of my experiences in comics and public health. And then I will be talking about the different ways that comics can be used in communicating about health promotion, health, education, things like that.

So, about me, my love of comics and science started as a child, as a as a person, as a child who had trouble staying on task with reading and things like that. I was introduced to comics as a way of perhaps helping me focus more. And it definitely worked- as a teen and young person, I started to read and make comics to connect, cope and learn.

As a child, I read superhero comics- things like Archie- as I became older, I discovered there was a whole nother world of comics, that there were personal narratives, there were non-fiction comics that there was, everything that you could imagine. And so, for me, reflecting on my own experiences, trying to understand things like my own identity, trying to just understand a lot of things about myself in the world.

Comics are a great way to help figure those things out, and I also use them as a teaching tool. When I was an undergrad, and I was in grad school, I'd often make comics study guides when I was studying for an exam because that was one way that really helped me synthesize and remember information. I also started to build this this health career alongside my comics career.

They eventually did merge, but I started on the small press comic scene about 15 years ago, just self-publishing and tabling and then eventually starting to work with publishers and become an editor. I would say that one thing also that really that really stuck out to me too, in my professional years was working as a high school teacher and having to deal talk to students, especially in areas, underserved areas, where I would have students come to me with issues like- I'm pregnant and I don't know what to do, I don't know where to go.

I actually worked at a pregnancy school for teens as well and encountered a lot of gaps in comprehensive health education. After grad school, I went to work at various colleges doing health education, where we even used comics as teaching tools and then transitioned more into full time comics. Both making my own work- both web and print- and then working as an editor most recently and most intensively for the NIB. Which for formerly the NIB, which closed this past year, which was a site for political comics, comics, journalism and non-fiction comics.



I have also worked as a health educator clinically as well, especially around women's health, sexual health. And I am a mom. So, to me, comics, public health, and parenting are all community oriented at their best. And that's kind of my philosophy.

The value of storytelling. People love stories- good stories and bad stories. So, there's a lot of different ways that we tell and receive stories, books, memes, podcasts, periodicals, blogs, videos, word of mouth and social media- is a really big one. I think we've seen the power, especially in recent years of social media and storytelling. We see the capacity for stories fostering empathy, connection stories, being educational teaching tools, and also stories just being fun.

And on the flip side, there can be appeal to emotional reasoning in a negative sort of way through storytelling. Stories can also promote misinformation and harm. When we see popularity of things like Instagram, Facebook, TikTok, Twitter, things like that, we both see people connecting in wonderful ways over social media sites. We also see the proliferation of negative things such as misinformation. One thing we're currently dealing with, for instance, is the anti-vax sentiment in this country, which is becoming particularly challenging. And places like social media are a perfect place to perpetuate that misinformation. I

'm going to share a little comic with you. This is a comic that it's very simple. It's it was, I think, posted on Lynda Berry's website, but it really sticks out to me because I feel like this really encapsulates the power of comics. So, the top panel, the mother says, I'm not sure how to look at art. [child] What's supposed to happen next when something big, a revelation, suddenly you just understand, [mother] not sure how to make it happen. [child] How about lift me up so I can see better? [last panel- mother holding child mimics painting of mother holding child]

Lynda Barry is a cartoonist. She's a professor at the University of Wisconsin, Madison, MacArthur fellow, wonderful educator, who is who I can't recommend highly enough her book syllabus "What it Is" and "Making Comics." Those are all wonderful text. If you're really looking to, even just for yourself, get into the spirit of cartooning.

MK had a really great definition of comics. I'm going to piggyback on that. Comics are sequential storytelling, usually. So, when we think of things like one panel comics, that is also a form of storytelling, not necessarily sequential in the way we usually describe it. Comics are, most importantly, a medium and not a genre that often gets confused. So, genres are things like science fiction, romance, stuff like that.



Comics are a medium, just like a painting or film, a way of communicating. They're visual, they are reproducible and shareable, which I think is particularly important. Whether that, you know, somebody's texting their friend or sharing with their friend a comic on Instagram or zines, which are wonderful because they can be cheap to reproduce. All you need is like a copy machine and some paper, and they are a tool of abstraction.

They're a tool for thinking, communicating, processing, synthesizing and understanding the world. And they are everywhere. Like MK brought up the flight pamphlet that you get when you're seated in an airplane- and that's it. That's something that part of our culture. During the early parts of a pandemic, we saw a lot of images about sequential sequentially showing how to do correct handwashing.

That is what I would consider to be a comic. These are things that we're just used to in our everyday life. And I'm going to define a few more things. These are just two definitions that I happen to like. "Public health is the art and science of preventing disease, prolonging life and promoting health through the organized efforts of society," Sir Donald Acheson [Chief Medical Officer, UK, 1983-91].

And then from W.H.O., "health education is any combination of learning experiences designed to help individuals and communities improve their health by increasing their knowledge or influencing their attitudes."

All right, so comics for health, education, comics can translate complex, technical and often dry concepts simply and visually. They can teach individuals and populations in way that's engaging and empowering. And then they can tie the past, the present and the future. I'm going to go into each of these in a little more detail.

Comics can teach individuals and populations in a way that is engaging and empowering. I think that comics can be thoughtfully crafted for various audiences. So that's something that I think about whenever I'm creating a comic. Is this for a general audience versus for a certain age group for people living or from a certain culture living in a specific location, things like that.

And some wonderful examples are the work of Malaka Gharib, who is a journalist for NPR. This is a comic she did in 2020 at the beginning of the pandemic called "Exploring the New Corona Virus, a Comic Just for Kids." It was specifically tailored to younger audiences and made available in a PDF format that could be folded into a zine. This got a lot of many, many, a lot of downloads. It was very popular and I also think it's just because of how clearly and simply and invitingly how it was illustrated.



Another example is this line from Limericks Press [not discernible], which is based, I believe, in the Pacific Northwest. They have been doing this quick and easy guide series, so these are some examples of queer and trans identities. A “Quick and Easy Guide to Sex and Disability,” “A Quick and Easy Guide to Consent,” and “Wait, What?” Which is another part of their series about sex ED for teens. And one of the creators, her name is Isabella Rothman. I've been using her comics to teach sex ED since I was working in colleges, and they were very, very well received.

Kriota Willberg from the publisher Uncivilized Books is another example specifically geared towards visual artists and cartoonist. But really it could be for anybody who works in, sits in an office, in a desk job. It's perfect. Comics like these can build self-efficacy and foster skill development through modelling. A lot of these show how to do things, how to stretch, what type of regimen you should take to make sure that you keep your body healthy and limber.

And they show pictures- how to put on a condom and other things, how to have a difficult conversation with someone. These things model things, and we know that when people feel that they have the ability to do something, when they feel that they have that self-efficacy and it's modelled for them, they're more likely to change those behaviors or to change their attitudes about something.

And comics are a great way to facilitate that. Another example is for teaching individual populations that in a way that's engaging and empowering, they can, it can destigmatize sensitive topics. I think comics has always had a wonderful way of engaging in things that that might be difficult to talk about.

Mental health is a big one. This is a book called “Let's Talk About It.” It's actually a comic pamphlet from creator [not discernible]. It's a guide to mental health, and it's part of the graphic series from the Centre for Cartoon Studies, which is based White River Junction, Vermont. It's a school for cartoonists. They have an applied cartooning program there, which is really use it. How do you use comics for the greater good? How do you use it in an educational instructional way? This book was created for teens, and this is creator [not discernible] is now actually putting out a book in April that is a guide to mental health for children. Another example of this is artist Kate LaCour, and this is on harm reduction and safe injection. And this was made for a non-profit in New York City.

That is a harm reduction service. And there's many such things. I mean, there's many such comics out there that really do broach these very important but sometimes sensitive topics. Like MK mentioned, comics can be a tool for advocacy.



This is an example. This book is called “Comics for Choice.” I am one of the co-editors on it, and it was originally published in 2017 and got its second printing this past year with some updated information as laws have changed.

This was something that we did in partnership with the National Network of Abortion Funds, and we testified what we ended up doing was actually connecting with people who had had personal experiences with abortion, connecting them with artists and illustrators, and having them work with that creator to tell their story. We raised money through this for National Network of Abortion Funds, and we also went over the historical and legal aspects of abortion just to kind of give a round picture and context to everything.

They can translate complex, technical, and often dry concepts simply and visually. As we know, public health, medicine, health, education, are not always known for being the most dynamic in terms of... when we think about how they connect with people. I didn't say that quite eloquently, but my point is that comics have a way of kind of bringing out the... I will just rephrase it. Comics are wonderful in that you can use devices such as visual metaphor, which is what MK mentioned, as well to explain theoretical concepts.

For instance, right below is a picture from Mona Chalabi, who is a data journalist, a reporter who's won the Pulitzer Prize for some of her visualizations on COVID-19. This is an example of one causes of food poisoning. And it's kind of silly, but like I think it does get the point across. It helps people understand, like understand things that might be hard to really to really grasp that might seem kind of distant or removed. This really shows it in kind of a kind of a fun way. [graphic of people throwing up at different levels of intensity] And it helps people have a greater understanding. It's great for risk communication.

Another example right down here is to the right is part of a comic that I made on maternal mental health and race, which came out in 2020 through the NIB. Here the visual metaphor here is using a child stacking toy to talk about the sustained research informed multilevel approach to decreasing poor maternal health outcomes among black women in the United States.

Continuing with that, I have an example down here- “Vaccines Work Here are the Facts” by Maki Naro on the left. This was also published by the day that came out in 2014. Still very relevant today. And it's talking about herd immunity in this case, which is something that's very technical, maybe a little bit removed from the average reader to illustrate it



and bring it to life something that is really helpful for people who might not have a background, for instance, in physiology, immunology, things like that.

Also, “Health and Wealth” is another example, another CCS Graphic Guide. This was created by James Stern, one of the founders of the Centre for Cartoon Studies. He was a Harvard Radcliffe fellow back in 2020, 2021, and he worked with a group of health care professionals, illustrator Cass Lee, to create this graphic guide to the US health care system. Again, the U.S. health care system can seem overwhelming to the average person. It's very it's very complicated. First of all, illustrated graphically using Richard Scary-esque characters, which is something that people are very familiar with, makes it more approachable to people of all ages. And it can tie the past to the present and future comics can provide a historical context and help us re-examine the past.

One example here is “No Ordinary Flu,” which I feel is very influential to me. I first attended the Comics in Medicine Conference back in 2014 when I was just trying to figure out... I was fresh out of grad school and wanted to do something with comics and public health and going to this conference... was very eye opening because I just I met so many people from so many different disciplines who are who are really hoping to use comics as a teaching tool.

Meredith Li Vollmer, who MK mentioned, made “No Ordinary Flu.” She is a communication specialist for a Seattle Kings County Public Health Department and also a professor. And this was on the 1918 flu pandemic and just provided a lot of context also for people to keep in mind of what future pandemics might be like. Below that is a panel from a comic that I wrote that was drawn by a cartoonist, Chris Kindred, on the Tuskegee syphilis study and exploring the history of that, as well as looking at the state of health care today and mistrust in health care among black Americans. This is actually a springboard for me because I'm currently working on a book with illustrator Joyce Reiss for Macmillan for Second, which is going to be a history of public health in the United States, where expands on a lot of these issues just so that we can have more context for the world that we're currently living in.

And comics also help us evaluate and challenge current societal structures that perpetuate health disparities, for instance. So, this previous one was an example. Another one is another example I provided here is from the NIB from Larry Harris, who's a deputy editor at the NIB on the history of IVF. That's another one providing historical context. And then she went into her personal struggles with fertility, going into IVF and the industry around it.



So, these really can teach anybody about the world we're living in and how we've gotten to where we are. And I should mention, too, that Larry Harris and Sheinberg [not discernable], who were two former editors at the NIB, will be putting out a book on non-fiction comics and comics journalism from Abrams in 2025, which might be of interest to folks.

And then a few more examples. They pave way for improved public health practice. These are some examples of comics and graphic novels discussing contemporary issues in public health. "Seek You" from Kristen Reid, who was art director at The Believer, which was a magazine. She did a graphic novel on loneliness, which is a public health issue, a public health epidemic, some might say.

Dan Nott is another cartoonist who just got a nomination for National Book Award for his book "Hidden Systems," which looks at the infrastructure of everyday life that I would say is also connected directly to public health. And just going back to graphic public health for Meredith Li Vollmer, this includes a lot of the work that she's done in her role as a communications officer, working with different people at the clinic and different artists to talk about the state of public health and how comics can be used for everything from risk communication to health promotion, etc.

This is just a brief overview, but my point is to say that I think that the group of people reading comics is only growing. We look at book sales nowadays for instance, and we see that middle grade and YA comics are one of the fastest growing markets in books right now. It's pretty wild.

Those readers will eventually become adults, and if we could teach comics literacy at a young age, we can also teach health literacy and we can combine those two. So, I see comics as being a very bright and promising means through which to really teach people about health literacy and to promote healthy behaviors. I will end there for now and we can take questions.

Thank you.

Elizabeth

Thank you, Whit, so much. This is really fabulous and thanks again, MK as well. And thanks to the many attendees who have been blowing up the Q and A. We will hop right into these, and I encourage folks to also continue that conversation online in the Q and A. We did get a question that either one of you could answer.



How do you get buy-in within an academic environment- someone else asked about at NIH- to try to implement graphic medicine in, research, interventions, or translation, given that some academics or the other questioner was asking about NIH staff can be more or less receptive? Either one of you.

MK

I can start. What I found is because I've had an interesting experience, I found that medicine has been very willing to kind of take this up, but I've had a little more resistance in nursing. I think it's because, you know, there's a lot of reasons I won't go into. But what I found is if I can get to a university and they let me speak with the faculty of the nursing school, all you have to show them the work, right?

Like the kind of things- we should just show on the comics, have them read them together. Just really just once they get their eyes on these what's out there, they are convinced, and it starts to get some uptake. So that to me, if you want to just get it in front of them, whether in a presentation, have it in your slides, read through the comics to show how it's doing the work, the that are their goals.

Whit

I can really only speak to like a younger population. So middle school, high school students, college students, just even anecdotally, those were some of our most well-received and most well-read materials were comics. Honestly, there's something to that can be shared. They can be passed to a friend. And I think if we look at how we're using media nowadays, especially with younger generations, where people getting their information, whether it's correct or not, a lot of it is coming through the Internet, through memes, through infographic, things like that.

That's what we're seeing a lot of. I think that as comics become more normalized, again and as we're able to see that they're not just something for children, but there's something for anybody, they're a medium that hopefully people will be able to expand the way that they think about them.

Elizabeth

Thank you. And I'll do another two-fer and then maybe Miya, maybe you can handle one. We had a few questions about how to make the connections. How can I find a cartoonist? How do I connect my comics to health care providers?



Whit

There's plenty of great resources out there, and I'm sure MK will talk more about what they're doing with graphic medicine, but there's plenty of databases. For instance, out now there's a cartoonist of color database, there's a queer creators database. There's various women's cartoonist and illustrator databases out there where they will provide information on the on the artist, links to profile, things like that, website.

There's plenty of folks looking for work, which is exciting, and I do recommend working with somebody who has is seasoned and has experience in visual communication. I think that's super helpful. What else what add. And I think there is also more receptiveness to this in general that I've seen in recent years. I'm seeing a lot more places like, you know, The Washington Post, The New York Times, major news organizations, that are really starting to use comics in print and on web.

So, I think it's an it's a great time for it.

MK

Another great way for researchers to find a cartoonist to work with is go to your local independent comics expo. In Bethesda there's SPX, there's in Boston has MICE, Chicago has a CAKE, something called CAKE, the Chicago area... Every kind of larger area has- and even some smaller areas and university campuses has comics expos.

And a lot of times what you'll find is people who are maybe with PhDs in different fields who are then integrating comics into that field. And it also what's great about it is you can walk a room and see like hundreds of cartoonists, New York has an expo as well. I'm thinking you just walk through- and you can see the visual style. You can chat them up about their experience, their availability. So those- usually annual events. And of course, we have an annual graphic medicine conference where people can meet cartoonists. And also, we're hoping to put together a database on as a resource. We're really working on resource development on our website. And one of the resources we want to develop is that kind of database to pair artists with researchers.

But you can email us through the website too, because we often kind of know people who have who have projects and have the skills and all that. And then there is one other thing. Oh, someone had asked about like, how do I get my- I got



the idea that the person who asked the question had made comics about their experience- “how do I get my provider to kind of maybe connect with that?”

I would highly recommend- take your comics in to your appointment. I've done it. I've given my, you know, my doctor, my book, a copy of my book on menopause. And they're usually really excited to learn that you're processing the experiences and can help even maybe sometimes use those as resources for other people. If you're comfortable with that, I would highly recommend just bringing it into your provider.

Whit

And just to add one more thing to that. Yeah, I just want to second what MK was saying about shows that those have been one of the best experiences personally for me and just in terms of meeting diversity of creators, SPX a small press expo in Bethesda, Maryland, also has a great program with the Library of Congress where they're cataloguing a lot of these works.

So there really is an effort and I think a value that the, you know, the larger community is starting to have about preserving these works. Also, Zine Fest, which tend to be smaller. A lot of regional Zine Fests have a long history of activism. And that's a place where you can also often find a lot of local low cost produced products.

Elizabeth

Thanks. And Miya, I think we have time for one more. If you have one more for us.

Miya

Sure, that would be great. Whit, I love that you talk about intentionally about health disparities, populations, as you know, both in terms of research, but sometimes just around health topics in general. There are definitely underserved communities of communities that are not well represented in research. I wanted to encourage you both to kind of give us some thoughts about graphic medicine as a tool for health education and for underserved populations, and also as a part of the process to sort of amplify community-based processes of community engaged research.



Whit

Thank you. MK, would you like to speak first or want me to jump in? One thing you know, just thinking about the one of the strengths of comics, again is low cost, easy to reproduce, easy to distribute. I have like heard of things like that being brought to where people are. That's often one of the best ways to actually educate and give people resources is to go to where they are.

For instance, in certain communities where like a hair salon might be the place where people gather and get information, there have been studies in places where people, for instance, will bring small comics about a, you know, a relevant health issue to a place like that. Last night I was reading an article about suicide deaths by gun in Wyoming and how Wyoming has the highest rate of suicides by guns and how gun shops, because the laws are likely to change for political reasons.

Gun shops are becoming a place where people are going to actually develop connections with people around mental health and to have those conversations. So, I was like, that would be a great place to have zines, for instance, about mental health they are comics about mental health. I do think that there is a great there's great capacity to do more community-based research and dissemination.

Elizabeth

And I am so sad to cut this conversation off. This has really been a phenomenal session. Thank you both for sharing your time and your expertise. I would like to call everyone's attention. In the chat, we shared the link for registration for our next session, which will be in March and will focus on endometriosis, and our two speakers today have really generously agreed to answer any questions that they were not able to get to today, and I've put their emails in the chat. Thank you both for that.

On behalf of the Office of Research on Women's Health, it is my real honor to again thank you both for your time today. I'd like to thank our IT support Mike and our captioner Cynthia, as well as the communications team for their promotions of this event and the whole team, ORWH working on the back end and invite all of you to stay in touch with us [NIH.gov/women](https://www.nih.gov/women). We have lots of stuff happening and hope to see you all in the future. Thank you so much. And today's session is adjourned.