Introduction to Graphic Medicine

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Introduction to Graphic Medicine

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Some Logistics...

• This webinar is being recorded – look for the recording in about a week!

• Open for questions/discussion at the end
A Story
A Story

http://www.graphicmedicine.org/about
Definitions

• “Graphic Medicine is the intersection of the medium of comics and the discourse of healthcare.” – Ian Williams, MD

• Comics are comprised of... “juxtaposed pictorial and other images in deliberate sequence, intended to convey information and/or to produce an aesthetic response in the viewer.” – Scott McCloud
Problems with these definitions?
Problems with these definitions?

- Broad
Problems with these definitions?

- Broad
- Narrow
Problems with these definitions?

- Broad
- Narrow
- Subjective
Roles for Librarians

- Health Literacy
- Consumer Health
- Medical Education
- Research and Discovery
Background: Health Literacy

- Only 12% of US adults are considered proficiently health literate
  - Minority groups, the elderly, and those with less education are disproportionately impacted

- Poor health literacy is tied to all manner of healthcare problems:
  - 4 times higher healthcare costs…
  - 6% more hospital visits…
  - 2 day-longer hospital stays…
  - And more

- Medical education needs to give special attention to ensuring future physicians can communicate clearly
  - “Most complaints about doctors are related to issues of communication, not clinical competency.” (Ha & Longnecker, 2010)
Background: Visual Literacy

- Definitions are often subject specific, but focus is always on ability to accurately interpret visual images.
- Recognizing the increasingly visual world, in 2011, ACRL approved the Visual Literacy Competency Standards for Higher Education.
- Numerous studies have found a positive relationship with comics readership and increased visual literacy competency.
  - Studies have similarly found comics to be a valuable tool in print literacy development.
Comics and (Health) Literacy

A Novel Tool for Health Literacy: Using Comic Books to Combat Childhood Obesity

Talicia Tarver, Deloria Woodson, Nick Fechter, John Vanchieri, William Olmstead & Charlie Tudor

Patient Education and Counseling
Volume 56, Issue 4, April 2015, Pages 518-524

Journal of Stroke and Cerebrovascular Diseases
Volume 24, Issue 11, November 2015, Pages 2533-2539

Original Article
Effective Education Materials to Advance Stroke Awareness Without Teacher Participation in Junior High School Students

Satoshi Chiyama, MD, Chiaki Yokota, MD, Furino Miyahita, MD, Tsukasa Amano, MD, Yasuteru Uchide, MD, Yuya Shigehatake, MD, Yuki Sakamoto, MD, Kazunori Toyoda, MD, Kazuo Minematsu, MD

A Mixed-Methods Study of Immigrant Somali Women's Health Literacy and Perinatal Experiences in Maine

Susan D. Jacoby CNM, DNP, RM, Monique Lucarelli MD, Fowsia Musse, Ashok Krishnamurthy PhD, Vince Salyers DNP, RN

First published: 13 October 2015
DOI: 10.1111/jmwh.12332
“I don’t know how to read a comic!”

Consumer Health

• Librarians are regularly engaged in providing timely, evidence-based medical information. Few patrons can understand jargon-filled scholarly work however…

• People like narratives. Stories make things relatable.

• MedlinePlus is fantastic for factual knowledge. Graphic Medicine can meld that knowledge together with human experience.

• For some, reading about another person’s experience with illness can be therapeutic.
  – This is one aspect of Bibliotherapy – a field unto itself that Graphic Medicine may play a role in. Sarah McNicol’s research provides a good introduction: doi: 10.1136/medhum-2013-010469.
Meet you at eight for a jog around the neighborhood! See ya, Ray!

Wow, your buddy Ray really got you hooked on exercise!

I'm jealous - I try, but I always quit after a month or two. How do you keep yourself going?

Well, I plan things out ahead of time and lock them in my schedule!

I'll do yoga sometime this weekend.

Nope, didn't do it.

I'll take a walk for half an hour...

... on Sunday at 10am.

And click save, and done!

I don't wanna get up...

... but I already prepaid for that bellydance class!

And I tackle anything that gets between me and my exercise. Make it easy!

Like how I kept missing my morning workout because I didn't have time to get all my gear.

Now I pack everything up the night before so I can grab it and go!

Isn't it a little hard staying so dedicated?

Well, I also make sure to treat myself along the way as a reward! Guess what I bought during lunch break?

Ooh, a new phone case? Cupcakes?

Even cooler!

New workout outfit!

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Diabetes Views
http://mghdiabeteseducation.wordpress.com
Melanoma, Medikidz Comics

In someone with melanoma, it's the melanocytes that start behaving badly.

Melanocytes are normal cells that make the pigment melanin, which gives your skin its color. In melanoma, these cells grow out of control and can spread to other parts of the body. This is why it's important to know the signs and symptoms of melanoma and to seek medical attention if you notice any changes in your skin.

The cells that make up melanoma may start to grow in clusters or cords, or they may form a lump called a tumour. These tumours can grow and become larger, spreading to other parts of your body. This is why early detection is so important.

If you notice any changes in your skin, such as a new mole or any changes to an existing mole, it's important to see a doctor. Early detection can lead to successful treatment and a better outcome.
OSTEOPATH PASSES THE BUCK, TELLS MOM TO FIND NEUROSURGEON IN YELLOW PAGES.

I'M TRYING TO FIND A PHYSICIAN TO SEE MY MOTHER...

NURSE SIS WORKS PHONE.

DUMB LUCK

SHE STUMBLES ONTO DAD'S FORMER SECRETARY, NOW WORKING FOR A NEUROLOGIST, WHO TELLS HER TO SEND OVER THE M.R.I.

RANDOM CHANCE

KID SIS COMMISERATES WITH AN OLD FRIEND WHOSE MOTHER HAS BRAIN CANCER...

MEANWHILE...

WHICH IS HOW MOM GOT A DATE WITH THE CHIEF OF NEUROSURGERY AT IMPRESSIVE UNIVERSITY, WHICH DID THE C.T. SCAN THAT SHOWED THE TUMORS PACKED INTO HER CHEST. CONGRATULATIONS!

LET ME E-MAIL MY MOM'S DOCTOR...

I CAN SEE YOUR FRIEND'S MOTHER ON THURSDAY.

Mom's Cancer by Brian Fies
Pain is Really Strange by Steve Haines

In the London 2012 Olympics Mamoa Mitchell ran the first leg of the heat for the 4x400 metres relay and felt a pop. X-rays revealed afterwards that he broke his left fibula. His team still qualified (Huffington Post 2012).

The dancer’s experience is the centre of a great TED talk by Krasn (2011). ‘Alloedynia’ is the term for when light touch generates severe pain - the nervous system is confused and sensitized.

A YOUNG DANCER SPRAINS HER WRIST AND THE PAIN AMPHIFIES UNTIL BEING TOUCHED WITH A FEATHER IS A TERRIBLY BURNING.

80% OF PEOPLE WITH AMPUTATIONS EXPERIENCE PAIN IN THE PHANTOM LIMB: THEIR BRAIN TELLS THEM IT IS STILL THERE AND IT HURTS.

YOU CANNOT PREDICT PAIN BY LOOKING AT MRI SCANS OR X-RAYS.

SEENING X-RAYS AND MRI SCANS MAY ACTUALLY MAKE YOU MORE LIKELY TO EXPERIENCE PAIN AS THEY LOOK SCARY.

IN FACT MANY OF US HAVE TORN TISSUES, DISC BULGES AND KNARLY LOOKING BONES WITH NO PAIN.
Medical Education

• Empathy

• Identity Formation

• Illustrating Physician Experience

• Value of Comics as Educational Tool
Empathy

Mom’s Cancer by Brian Fies
Identity Formation

Home

A collection of graphic stories by fourth-year medical students at Penn State College of Medicine

Since 2009, fourth-year medical students at Penn State College of Medicine have created comics as part of a course called "Graphic Storytelling and Medical Narratives." The course was developed to show fourth-year medical students how graphics and text can be used to effectively communicate complex medical narratives and to help students develop their own stories into graphic depictions.

Taught seminar-style, the course requirements are minimal: participate in all classroom activities, be good colleagues to one another, and produce a short, original, graphic narrative, or comic.

Of course, not all medical students are naturally gifted writers or artists, but as one can see from the following pages, everyone can tell stories and everyone can draw pictures. While this course is unlike any other in their medical school experience, the students rise to the task, sharing their reflections on becoming a doctor with honesty, wit, and creativity.

Michael Green, MD, MS, FACP
Course Director, Professor of Humanities and Medicine

https://sites.psu.edu/graphicnarratives
Illustrating Physician Experience

Left: From *The Bad Doctor* by Ian Williams
Above: MK Czerwiec’s exploration of her experience as a nurse for HIV/AIDS patients
Educational Tool

• Using comics for pre-class preparation
  – https://dx.doi.org/10.1111/medu.12868

• A Potential Use for Manga in Medical Education
  – https://dx.doi.org/10.1097/ACM.0000000000001063

• Memory for biopsychology material presented in comic book format
  – http://dx.doi.org/10.1080/21504857.2016.1219957
Research and Discovery

• Graphic Medicine is still an emerging field.
  – There is more that we don’t know (in the scientific sense) than we do.
  – Most studies are small and/or narrow

• Opportunities for librarians to get involved in research:
  – Our skills and knowledge make us ideal for exploring graphic medicine.
  – Example: P.F. Anderson (Taubman Health Sciences Library) led this study on building empathetic communication: http://dx.doi.org/10.1016/j.jacr.2016.09.015.
Research and Discovery

• Research into comics and medicine is minimal. What does exist can be unduly difficult to find.
  – MeSH terminology for comics is faulty (Cartoon-as-Topic is far too broad, misses the mark)
  – Numerous ways of saying comics make keyword searching problematic.
  – How can we improve findability of studies?

• Comics created for research studies on medical comics often disappear.
  – Difficult to replicate research without access to the exact comics being tested.
  – Perhaps a role for LIS in graphic medicine is to collect, store, and make these comics available? Consider our emerging role in dataset curation.

• Collections – both in public and medical libraries – are sorely lacking in medical comics
  – If comics on medical topics do exist, how are we helping patrons find them?
A Research-Focused Graphic Memoir

- *Raised on Ritalin* by Tyler Page

- Unique in that it is both a personal account of life with ADHD and a well-researched, historical account of ADHD and the pharmaceuticals industry surrounding it.

- Tyler’s graphic novel includes an extensive bibliography, made available online here: [http://raisedonritalincomic.blogspot.com/p/raised-on-ritalin-research-bibliography.html](http://raisedonritalincomic.blogspot.com/p/raised-on-ritalin-research-bibliography.html).
Keeping Up-to-Date

• Graphic Medicine website – www.graphicmedicine.org
• Social Media:
  – GM Twitter List: https://twitter.com/NoetheMatt/lists/graphmed-graphlib-list
  – Graphic Medicine Facebook page: https://www.facebook.com/Graphic-Medicine-118202494896480/?ref=page_internal
• Graphic Librarian Blog – www.graphiclibrarian.wordpress.com
2017 Comics & Medicine Conference: Access Points

- June 15th – 17th
- Seattle Public Library Central Branch
- Registration Opens March 18th
- Special Librarian Brown Bag session on March 16th

Conference Art by E.T. Russian
Our Efforts

- Created in August 2016, the Lamar Soutter Library’s Graphic Medicine Collection now holds 65+ titles.
  - Holdings in WorldCat

- Last December, we hosted James Sturm, Director of the Center for Cartoon Studies for a talk on applied comics and their partnership with White River Junction VA.

- Beginning this academic year, 3rd-year UMass Medical Students will have the option of taking a 1-week course on Graphic Medicine

- And…
Announcing Graphic Medicine Book Club Kits!

Graphic Medicine Book Club Kits

<table>
<thead>
<tr>
<th>Graphic Medicine Book Club Kits</th>
<th>Addiction</th>
<th>Aging</th>
<th>AIDS</th>
<th>Cancer</th>
<th>Epilepsy</th>
<th>Grief</th>
<th>LGBTQ</th>
<th>Mental Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCD/Doctor-as-Patient</td>
<td>Veteran's Health</td>
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What is a Graphic Medicine Book Club Kit?

Kits are...
- Available for any New England-based organization
- Loaned for six-weeks at a time
- Non-renewable
- Free-of-charge – mailed to you by us, with a return shipping label included
- Appropriate for both new and long-time comic readers
- Great for students, faculty, professionals, and the public alike!

Request a Graphic Medicine Book Club Kit [HERE]!

Contact Matthew Noe (Matthew.NoеБасс.мэд.куп or 508-856-2229) if you have questions about the kits or suggestions for other Graphic Medicine kit titles or programs.

Topics and titles available can be seen by clicking the green tabs above.

Thank You!

Questions? Comments? Suggestions?

Feel free to contact me any time at: Matthew.Noe@umassmed.edu @NoetheMatt on Twitter

A full bibliography for this presentation can be found here: www.graphiclibrarian.wordpress.com/graphic-medicine-in-the-academy