

in this issue >>>

Writer's Block: Plagiarism
Epi Corner
Bulletproof Stats
Data Bytes
Ask the Experts
Client Feedback
Final Thoughts



A Quarterly Insight on the Services our Division Offers

DEB quarterly

Plagiarism: When Borrowing Words and Ideas Goes Bad!

Academic scholarship is built upon the work of others, as such we have to use the work of others to justify and explain our own scholarly findings. To give credit to these prior scholars we use **citations** and quotations to indicate to our readers that an idea is not our own.

In the medical and scientific literature use of quotations is limited instead we prefer to **paraphrase**. When paraphrasing is done correctly very few of the words in the original text are reused. However, both quotations and paraphrased material needs to be referenced to indicate where that material came from, otherwise an adequately paraphrased statement may be interpreted as plagiarism. Citations can be indicated via in-text citations, endnotes or footnotes.

Plagiarism occurs when a scholar uses someone else's words or ideas as their own without giving credit to the original author. One of the "golden rules" that academics follow is to give credit where credit is due. Simply changing the words in a sentence with synonyms is not sufficiently different. The idea must be woven into your own ideas. We use the ideas of others to support our own scholarly pursuits.

Common knowledge, such as well-known or basic facts, does not need to be cited. Common knowledge includes information that your readers will already know, or something that could be easily located in general reference materials.

Why should you care?

Publishers commonly utilize plagiarism detection software to quickly assess if new manuscripts they receive for publication contain any plagiarized text. Plagiarism is grounds for rejection of your manuscript, but may also tarnish your reputation as a scholar. Depending on the situation, it can also have legal repercussions.

WMed has a subscription to plagiarism detection software to check our scholarly works before submission. To have your manuscripts checked contact our Medical editor, Dr. Laura Bauler (laura.bauler@med.wmich.edu).

QUOTATION

Using someone's exact words indicated by "quotation marks" in the text

PARAPHRASE

To reword the work of a peer but express the same ideas or meaning

PLAGIARISM

To use the words and ideas of others without giving credit

CITATIONS

Indications in the text to signify to readers where the original information came from



Writers Block
By: Dr. Laura Bauler, PhD

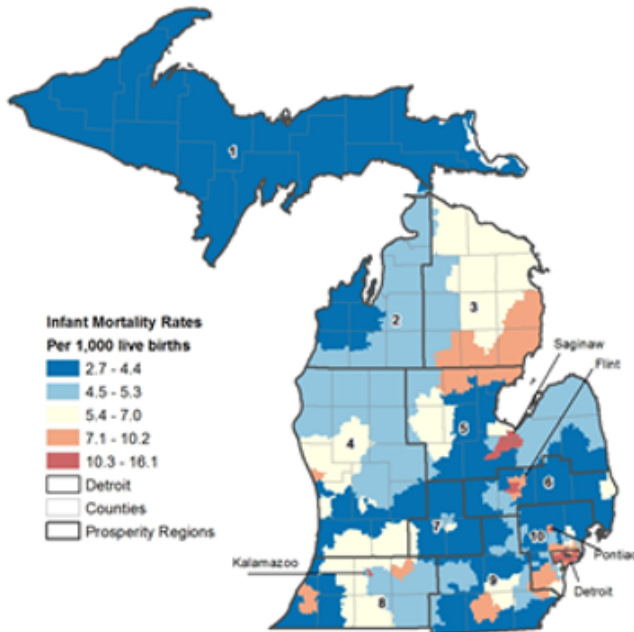
Mapping Disease to Promote Health

By: Dr. Catherine Kothari, PhD



Epidemiology is the investigation of disease across people, places and time. Epi investigations describe the disease itself, its distribution, and its causes. Disease mapping is a powerful epidemiological tool, used to identify disease clusters (e.g., hot spots), illustrate relationships between environmental condition and disease, locate health services, and monitor their effectiveness. Here in Kalamazoo, the maps below have been critical in generating consensus and action by medical, public health and community institutions; highlighting a significant health problem, marked by substantial racial and socioeconomic disparity, that is geographically concentrated.

Map #1. Annual Infant Mortality Rates Across Michigan



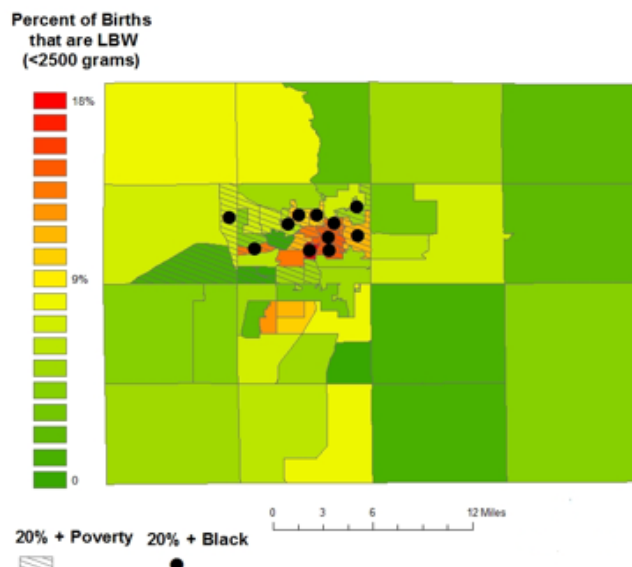
- Infant mortality* is a widely accepted marker for the health of an entire population.
- Mortality rate is the prevalence of death among a population within a specific time and place. Calculating rates allows apples-to-apples comparisons between groups, places and times.
- Mapping rates communicates a large amount of information, with speed and impact.

*Case definition: death of a live born infant within 365 days of delivery.

This map illustrates that Kalamazoo is a hot spot for high infant mortality.

As a result, Cradle-Kalamazoo, a communitywide initiative, is focusing health promotion efforts on Black families, poor families and on hot spot neighborhoods.

Annual Low Birthweight Rates Across Kalamazoo County



- The colorful base map shows the distribution of low birthweight (% of neonates weighing <2500 grams), the strongest predictor of infant death.
- Overlay maps identify neighborhoods with high poverty (20% or more of the residents live below the federal poverty line) and racial segregation (depicted by 20% or more Black residents, which is double the county rate)

This map shows Black families are concentrated in the most disadvantaged neighborhoods, where residents have the worst birth outcomes.

Biostatisticians: We Aren't Human Calculators

By: Alyssa Woodwyk, MS

Working as a Biostatistician within a medical school has numerous perks: exposure to a variety of projects, opportunities to learn new statistical methods, as well as working with a diverse group of clients. In working with clients, I have found a common misconception of Biostatisticians is that they are simply "number crunchers". Others have commented that although they know we do cool stuff, they aren't clear on exactly what we do.

When I hear the term "number cruncher," I think of a monkey furiously typing away at a computer and punching numbers into a calculator to solve formulas and mathematical operations. In reality, a Biostatistician's job is far from that. While there is a bit of number crunching to be done, the majority of our work goes far beyond that. I will be the first to admit that I rely on my statistical programs and let the computer do the math, as our role is better defined as an engineer of scientific probability. We also ensure the appropriate statistical method is used – you can feed the computer any number and have it perform any calculation, but there's a chance you're performing the wrong statistical analysis.

Here at the WMed, our Division provides a service. The Biostatisticians, specifically, provide consulting on the design of research projects, assist in survey development, plan statistical analyses, and determine the total sample size required to address research objectives. We are heavily involved in projects from conception to dissemination. Additionally, we have a responsibility to ensure our statistical analyses are ethical, and that the analysis results are presented accurately.

While you may see us sitting at our computers, writing code in what seems to be an alien language, and generating reports that include a bunch of numbers and graphics, we also spend a lot of time ensuring our reports are written in a way that non-statisticians will understand. In other words, we provide substantial intellectual contribution to our clients' projects. The results, and furthermore their interpretation, are extremely important and it is imperative that they make sense to the reader. The numbers you see are not just numbers; they have a purpose to inform investigators and, hopefully, inform and change medical practice.

Whenever someone asks me what I do for a living, I tell them I use data to answer research questions. And that's 100% true. Biostatisticians are charged with taking information, making sense of it, and answering predefined questions. Using our results to learn more about medicine and seeing how excited researchers get when we present them their answers is very rewarding. Following through on the results and submitting them as an abstract, presenting them on a poster, or publishing them in a manuscript is the cherry on top. It is our little way of having an impact in the medical field.

Data Imported From Detroit



By: Dan Foley

WMed, I'm pleased to meet you. I'm your new database specialist at the Division of Epidemiology and Biostatistics. I look forward to working with the investigators at WMed to continue delivering high quality research.

Before returning to Kalamazoo, I have lived in Detroit for the last eight years. I was employed by the Wayne State University School of Medicine as an Informatics Specialist for the department of Emergency Medicine Research as well as the biostatistics and epidemiology research design group. I had a focus on REDCap database design and GIS mapping of public health data.

I am glad to have the opportunity to return to Kalamazoo, and to bring the skills and experience I obtained while living in Detroit. Stop by, send me an e-mail, or submit a support request on our website; I'm excited to do research here at WMed.

Client Feedback: Dr. Michael Klepser, PharmD, FCCP, FIDP

I worked with the Division of Epidemiology and Biostatistics on a number of projects involving medical students over the past year. For these projects I utilized database management, statistical analysis services, and support for navigating IRB. I have had amazing experiences working with individuals from Division of Epidemiology and Biostatistics, especially Heather and Alyssa. These individuals are knowledgeable, energetic, and professional. Never before have I had this level of exceptional support from data and statistical specialists in my career. They not only made conducting the projects easier, they most definitely made the projects better.

Q: *How do we contact you for project assistance?*



A: *That's easy, just reach out to us at epibio@med.wmich.edu*



final thoughts...

2019 KALAMAZOO COMMUNITY RESEARCH DAY

The Research Day Organizing Committee has heard your concerns regarding the timing of next year's Research Day and after doing some thorough research, next year's Research Day will be on Wednesday, April 17th, 2019. This will cause changes to the deadlines which will be announced within the next month.

We want to take some time to thank all of you for your support and attendance at the 2018 Research Day! Although there are some improvements we can make for next year, this year went smoothly and was a hit! With over 500 attendees at the event, we continue to show that Research and Scholarship is growing and improving at WMed.

Dr. James Cook, our Keynote Speaker at the 2018 Research Day event was a hit! He enjoys presenting and we were pleased to see that his presentation was well-received.

Feedback from the event suggest some needed improvements in the upcoming years. The Research Day Organizing Committee has heard you and you can look forward to an improved Research Day in 2019. If you didn't get a chance to complete the online evaluation and would still like to do so, please visit the link below:

[2018 Research Day Follow-Up Evaluation](#)



Epi & Bio
DIVISION

1000 Oakland Drive
Kalamazoo, MI 49008

Editor: Leah Bader
Contact us at 269-337-4609
[Epi & Bio Website](#)
epibio@med.wmich.edu



coming soon >>>

Important Upcoming Dates:

Friday, July 13, 2018 – New Research Day deadlines will be published on the website and on the screens at both campuses.

Wednesday, April 17, 2019 – 2019 Research Day

For Research Day related questions, please contact Leah Bader at:

researchday@med.wmich.edu



2018 Research Day Keynote Speaker:

Dr. James Cook

Presented:
Biologic Joint Replacement – Does it really work?