

# Information Empowerment: Foundations in Searching the Biomedical Literature



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Gurpreet K. Rana, MLIS (she/her/hers)  
Global Health Coordinator / Health Sciences Informationist  
Taubman Health Sciences Library  
University of Michigan



<http://bit.ly/CIRHT-RANA>

## Today (new or review?)



1. **Getting Started**
  - o Global Sexual & Reproductive Health Research Guide
1. **Going to the Source**
  - o Basics of searching the scholarly literature
3. **Searching: PubMed**
  - o Applying search basics to a major scholarly database



## Our brief time today... An Overview

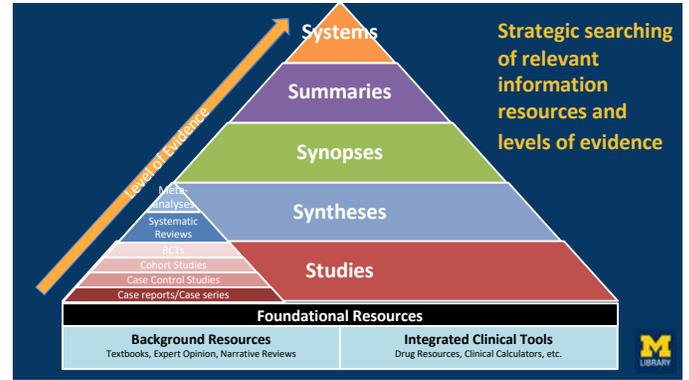
1



**Evidence based process:**  
Matching information resource to information need

THE GLOBAL GOALS  
For Sustainable Development

M LIBRARY



### Clinical setting: 5As Step EBP Process

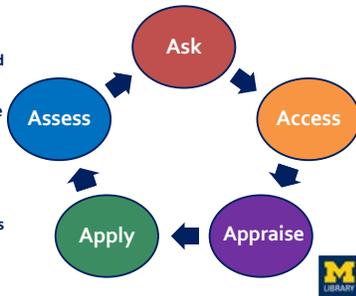
**ASK:** Formulate the clinical question

**ACCESS:** Develop your strategy and track down the best evidence

**APPRAISE:** Appraise the evidence for its validity and usefulness

**APPLY:** Integrate the results with your clinical expertise and your patient values / local conditions

**ASSESS:** Evaluate the effectiveness of the process



### Research setting: 5As Step EBP Process

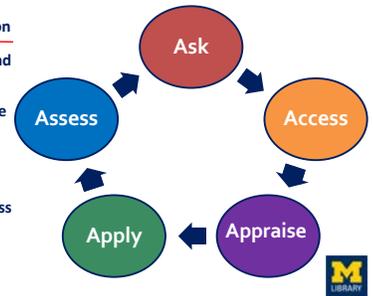
**ASK:** Formulate the research question

**ACCESS:** Develop your strategy and track down the best evidence

**APPRAISE:** Appraise the evidence for its validity and usefulness

**APPLY:** Integrate the results into your project/proposal

**ASSESS:** Evaluate the effectiveness of the process



### Global SRH Research Guide

Overview
Research & Clinical Resources
E-books & Publications
Policy & Practice Toolkits
Interactive Global Reports
Data Sources
Infographics
Mobile Resources
Webinars & Online Learning
Scientific Writing Resources
Organizations & Initiatives
COVID-19

- An ongoing reference resource





# 1. The Research Question

The comprehensive literature search begins with a *clearly defined and focused* research question

- Develop your strategy
- Know and Identify the appropriate information sources



# 1. The research question:

*How does violence affect mental health?*

-Possibly too **broad**

# 1. The research question

*How does a diagnosis of HIV during pregnancy impact the risk of IPV in Low/Middle Income Countries?*

-Possibly too **narrow**

# 1. The research question

*How does experiencing domestic violence during pregnancy impact maternal mental health?*

-Just **right**

# 2. resources

- Books
- Databases (journals, articles, etc.)
- Grey literature
- Datasets
- Experts

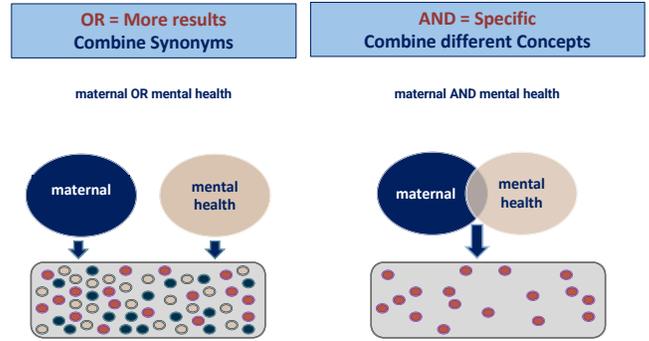
<b>Foreground Question:</b> Articles in databases like PubMed, GoogleScholar	<b>Statistics:</b> Government agencies; organizations like WHO, UN; MoH, studies like GBD
<b>Interventions:</b> Women Deliver, JHPIEGO; Exemplars in Global Health	<b>Grey Literature:</b> Conference proceedings, white papers, government reports

# 3. concepts and keywords

*How does experiencing **domestic violence** during **pregnancy** impact **maternal mental health**?*

How does experiencing domestic violence during pregnancy impact maternal mental health?

Main	Synonym 1	Synonym 2	Synonym 3	Synonym 4
Domestic violence	Intimate partner violence	IPV	Gender-based violence	
pregnancy	pregnant	maternal		
Mental health	Mental illness	depression	Depressive disorder	



## 4. Organize your search

- Figure out which terms to include and how to combine your concepts and keywords
- Document your searches to make revisiting or editing them in the future easier

For example:

**(domestic violence OR IPV OR gender based violence) AND (pregnancy OR pregnant) AND (mental health OR depression)**

### Exercise: Your search terms (Search Construction)

Search concepts

Alternate words

## 4a. Document your search

- Database
- Search terms
- Filters used
- Number of results
- Date searched

• Describe the search strategy in sufficient detail so that it can be replicated

```

PubMed [https://pubmed.ncbi.nlm.nih.gov/32817777/]
#
[Domestic Violence] OR [Intimate Partner Violence] OR [IPV] OR [Gender-based Violence] AND
[Pregnancy] OR [Pregnant] OR [Maternal] AND
[Mental Health] OR [Mental Illness] OR [Depression] OR [Depressive Disorder]
1
[Complementary Therapies] OR [Acupuncture] OR [Yoga] OR [Meditation] OR [Herbal Medicine] OR
[Chiropractic] OR [Martial Arts] OR [Tai Chi] OR [Qigong] OR [Meditation] OR [Herbal Medicine]
OR [Chiropractic] OR [Martial Arts] OR [Tai Chi] OR [Qigong] OR [Meditation] OR [Herbal Medicine]
0
[Behavioral Symptoms] OR [Psychological Symptoms] OR [Behavioral Symptoms]
#
P AND I AND D
[Behavioral Symptoms] OR [Psychological Symptoms] OR [Behavioral Symptoms] AND
[Complementary Therapies] OR [Acupuncture] OR [Yoga] OR [Meditation] OR [Herbal Medicine]
OR [Chiropractic] OR [Martial Arts] OR [Tai Chi] OR [Qigong] OR [Meditation] OR [Herbal Medicine]
AND
[Domestic Violence] OR [Intimate Partner Violence] OR [IPV] OR [Gender-based Violence] AND
[Pregnancy] OR [Pregnant] OR [Maternal] AND
[Mental Health] OR [Mental Illness] OR [Depression] OR [Depressive Disorder]
#
36 results in 1.2813
    
```

## 5. Run your search / 6. Evaluate your results

- Scan your results to evaluate relevancy
  - Are the articles on target?
  - If not, review your results and look for ways to improve your search
  - Have you combined your search terms correctly?
  - Revise and rerun your search
- Searching is an iterative (ongoing) process...



## Searching is iterative!

Review your results.  
Revise your search.  
Rerun your search.  
Repeat.



## searching with phrases

Your search: heart attack

Article title:

*High-dose atorvastatin and risk of atrial fibrillation in patients with prior stroke or transient ischemic **attack**. (American **Heart** Journal)*

Your search: "heart attack"

Article title:

*Study links drugs for Alzheimer's disease with reduced risk of **heart attack** and death.*

## 6a. revise (with limits)

- You may find limiting your search to publication types helpful:
  - Only want to see the highest levels of evidence?  
Limit to "Systematic Reviews"
  - Want to see individual studies?  
Possibly limit to "Clinical Trials" or "Case Reports"

common limits

- Publication types
- Publication date
- Languages
- Subject
- Sex
- Species
- Ages

## 6a. Revise (Resources)

- There may be a database better suited to your question
- Perhaps you are looking for background information rather than research

## 7. select and organize articles

- Select the relevant articles
- Save the citations
  - Organize in a meaningful way:
    - By publication type? By author? Study types?
      - Add notes
    - There is no perfect way to organize them
- Save within the database or use citation management tool like EndNote or Zotero



## Searching is iterative!

Review your results.  
Revise your search.  
Rerun your search.  
Repeat.



## Going to the Source: Scholarly Databases

Getting started (some sources):



Photo caption: Local boys wait to pump water in Midnapore, India. © 2019 Kristinns Ghosh, Courtesy of Protonshare

- [PubMed](#)
- [Google Scholar](#)
- [Global Index Medicus](#)
- [Cochrane Library](#)
- [AJOL: African Journals Online](#)

World Health Organization  
Global Index Medicus

Home | Scientific and Technical Literature | About GIM | Provisional Member

Link: [Global Index Medicus](#)

African countries engaging in ground-breaking COVID-19 vaccine initiative

All indexes | All Information Sources | Search by DeCS/MedRx descriptors

Enter what you are looking for

### Regional Indexes Medici

Regional Indexes Medici

- African Index Medicus (AIM)**: More than 10,000 bibliographic references from 250 scientific journals.
- Index Medicus for the Eastern Mediterranean Region (EMBASE)**: More than 207,000 bibliographic references from 714 scientific journals.
- Index Medicus for the South-East Asia Region (ISEM)**: More than 107,000 bibliographic references from 49 scientific journals.
- Latin America and the Caribbean Database on Health Sciences (LAC/LCS)**
- Western Pacific Region Index Medicus (WPIEM)**

World Health Organization  
Global Index Medicus

Search: (maternal OR maternity) AND "waiting homes"

Results: 1 - 4 of 4

- Effectiveness of Community Based Interventions in Reducing Maternal Mortality in Sub-Saharan Africa: A Systematic Review. O. Oluwalana, J. Maitland. Article (MEDLINE) | ID: w6928966
- Calidad de la estructura, de los hogares de espera materna de El Salvador, en el período febrero a junio del 2017 / Quality of the structure of maternal waiting homes in El Salvador, in the period February to June 2017. Yajaira Guzmán, Claudia López. San Salvador, 14 Jun 2017. PDF. Thesis in Spanish (LAC/LCS, WPIEM) | ID: bibno (144660)
- Casos de espera materna: modelo para la implementación, Documento técnico / Maternal waiting homes: a model for implementation. Technical Paper. Área de Asesoría de Salud, Dirección General de Promoción de la Salud. Lima, Perú: Ministerio de Salud, Dirección General de Promoción de la Salud, 2006. 59 p. PDF.

Cochrane Library  
Trusted evidence. Informed decisions. Better health.

Link: [Cochrane Library](#)

402 Cochrane Reviews matching **Reproductive & sexual health** in Cochrane Topic

Cochrane Database of Systematic Reviews  
Issue 5 of 12, May 2022

Order by: Publication Date - New to Cochrane

- Preconception lifestyle advice for people with infertility**  
Teezy Boedl, Anna-Catharina Varnhove, Melissa A Verone, Christoph Hattler, Elise Danco, Sharon Lee Fong  
Intervention. Review. 28 April 2022. New search. Conclusions changed. Show PDF(s) - Show previous +
- Surgical or radiological treatment for varicoceles in subfertile men**  
Emma Parnell, Claire AA O'Loughlin, Sami Kaur, Gernot Wagner, Nina Matyas, Helene Rosalia Hassler-Di Pratta, Barbara Hupfelmeyer-Breit  
Intervention. Review. 23 April 2022. New search. Conclusions changed. Show PDF(s) - Show previous +
- Ginseng for erectile dysfunction**

**Databases: Practice questions for your consideration**

- What is the impact of food insecurity on breastfeeding?
- How is access to women's health care impacted in refugees camps? Specifically, I want to focus on scholarly literature from the last 10 years.
- What are patient provider attitudes towards gender identify in health care?
- I am looking for articles on menstruation and cultural practices. I want to only view scholarly articles from the last 10 years.

**Searching:  
PubMed Basics**

3



**the research question**

*What is the association between retinopathy and diabetes in pregnancy?*

*What is the association between **retinopathy** and **diabetes** in **pregnancy**?*

**Concepts and Keywords:  
Building the Search**

Concepts	Alternate Words
retinopathy	retinal diseases, retina
diabetes	glycemic control, blood glucose, hyperglycemia, glucose intolerance, HbA1c
pregnancy	pregnant, gestation, obstetric, pregnancy complications, gestational diabetes

**Boolean Operators**

**OR = More results**  
Combine **Synonyms**

**AND = Specific**  
Combine different **Concepts**



<p><u>Concept 1</u></p> <p>retinopathy</p> <p>OR</p> <p>retinal diseases</p> <p>OR</p> <p>retina</p>	<p><b>AND</b></p>	<p><u>Concept 2</u></p> <p>diabetes</p> <p>OR</p> <p>glycemic control</p> <p>OR</p> <p>blood glucose</p> <p>OR</p> <p>Hyperglycemia</p> <p>OR</p> <p>glucose intolerance</p> <p>OR</p> <p>HbA1c</p>	<p><b>AND</b></p>	<p><u>Concept 3</u></p> <p>pregnancy</p> <p>OR</p> <p>pregnant</p> <p>OR</p> <p>gestation</p> <p>OR</p> <p>obstetric</p> <p>OR</p> <p>pregnancy complications</p> <p>OR</p> <p>gestational diabetes</p>
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**(retinopathy OR "retinal diseases" OR retina) AND (diabetes OR "glycemic control" OR "blood glucose" OR hyperglycemia OR "glucose intolerance" OR HbA1c) AND (pregnancy OR pregnant OR gestation OR obstetric OR "pregnancy complications" OR "gestational diabetes")**

NIH National Library of Medicine  
National Center for Biotechnology Information

PubMed.gov

Advanced Search

PubMed® comprises more than 33 million citations for biomedical literature from MEDLINE, the science journals, and online books. Citations may include links to full-text content from PubMed Central and publisher web sites.

- Learn**  
About PubMed  
FAQs & User Guide  
Finding Full Text
- Find**  
Advanced Search  
Clinical Queries  
Single Citation Matcher
- Download**  
3 Citations API  
FTP  
Batch Citation Matcher
- Explore**  
NCBI Database  
Journals

PubMed.gov search results for: **retinopathy OR "retinal diseases" OR retina AND (diabetes OR "glycemic control" OR "blood glucose" OR hyperglycemia OR "glucose intolerance" OR HbA1c) AND (pregnancy OR pregnant OR gestation OR obstetric OR "pregnancy complications" OR "gestational diabetes")**

Review the results for additional terminology

Diagnosis of preeclampsia in women with **diabetic** kidney disease...  
Novel glycoproteins identify preclinical atherosclerosis among women with previous pre-eclampsia regardless of type 2 **diabetes** status...  
Epigenetic Mechanisms in Type 2 **Diabetes Retinopathy**: A Systematic Review...  
Diabetic retinopathy (DR) is one of the most common eye complications associated with **diabetes**...  
Review of the management of sight-threatening **diabetic retinopathy** during pregnancy...

PubMed.gov search results for: **diabetes OR "glycemic control" OR "blood glucose" OR hyperglycemia OR "glucose intolerance" OR HbA1c AND (pregnancy OR pregnant OR gestation OR obstetric OR "pregnancy complications" OR "gestational diabetes")**

Diagnosis of pre-eclampsia in women with **diabetic** kidney disease...  
Novel glycoproteins identify preclinical atherosclerosis among women with previous pre-eclampsia regardless of type 2 **diabetes** status...  
Epigenetic Mechanisms in Type 2 **Diabetes Retinopathy**: A Systematic Review...  
Diabetic retinopathy (DR) is one of the most common eye complications associated with **diabetes**...  
Review of the management of sight-threatening **diabetic retinopathy** during pregnancy...

PubMed.gov search results for: **diabetes OR "glycemic control" OR "blood glucose" OR hyperglycemia OR "glucose intolerance" OR HbA1c AND (pregnancy OR pregnant OR gestation OR obstetric OR "pregnancy complications" OR "gestational diabetes")**

Another way: Use Advanced Search to combine your searches

PubMed Advanced Search Builder

Add terms to the query box

Query box

History and Search Details

Search	Actions	Details	Query	Results	Time
#3	...	...	Search pregnancy OR pregnant OR gestation OR obstetric OR "pregnancy complications" OR "gestational diabetes" Sort by: Most Recent	1,343,301	12:46:40
#2	...	...	Search retinopathy OR "retinal diseases" OR retina Sort by: Most Recent	288,630	12:46:26
#1	...	...	Search diabetes OR "glycemic control" OR "blood glucose" OR hyperglycemia OR "glucose intolerance" OR HbA1c Sort by: Most Recent	948,353	12:42:16

PubMed Advanced Search Builder

Add terms to the query box

Query box

History and Search Details

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#3	...	...	retinopathy OR pregnant OR gestation OR obstetric OR "pregnancy complications" OR "gestational diabetes" Sort by: Most Recent	1,343,301	12:46:40
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#1	...	...	diabetes OR "glycemic control" OR "blood glucose" OR hyperglycemia OR "glucose intolerance" OR HbA1c Sort by: Most Recent	948,353	12:42:16

PubMed Advanced Search Builder

Search terms: (retinopathy OR "retinal diseases" OR retina) AND (diabetes OR "glycemic control" OR "blood glucose" OR hyperglycemia OR "glucose intolerance" OR HbA1c) AND (pregnancy OR pregnant OR gestation OR obstetric OR "pregnancy complications" OR "gestational diabetes")

History and Search Details

Search	Actions	Details	Query	Results	Time
#3	***	3	Search: pregnancy OR pregnant OR gestation OR obstetric OR "pregnancy complications" OR "gestational diabetes" Sort by: Most Recent	1,264,004	19:21:17
#2	***	3	Search: diabetes OR "glycemic control" OR "blood glucose" OR hyperglycemia OR "glucose intolerance" OR HbA1c Sort by: Most Recent	871,900	19:20:56
#1	***	3	Search: retinopathy OR "retinal diseases" OR retina Sort by: Most Recent	273,214	19:20:35

National Library of Medicine

Search: (diabetes OR "glycemic control" OR "blood glucose" OR hyperglycemia OR ...)

Sort by: Most recent

1 Diagnosis of preeclampsia in women with diabetes...  
 2 Novel glycoproteins identify preclinical atherosclerosis among women with previous preeclampsia regardless of type 1 diabetes status...  
 3 Epigenetic Mechanisms in Type 2 Diabetes Retinopathy: A Systematic Review...

PubMed.gov

Search: (diabetes OR "glycemic control" OR "blood glucose" OR hyperglycemia OR ...)

Sort by: Most recent

1 From Pre-Diabetes to Diabetes: Diagnosis, Treatments and Translational Research...  
 2 ACOG Practice Bulletin No. 201: Gestational Diabetes Mellitus...  
 3 Maternal complications in pregnancy with diabetes...  
 4 Maternal complications of diabetes in pregnancy include obstetric complications such as pre-eclampsia, preterm labour, and macrosomia...  
 5 Worsening of diabetic retinopathy with rapid improvement in systemic glucose control: A review...

ACOG Practice Bulletin No. 201: Gestational Diabetes Mellitus

Diabetes Days Metab. 2019 Mar 21(3):454-466. doi: 10.1111/dme.14336. Epub 2019 Oct 15.

Diabetic retinopathy in pregnancy: a review

Diabetic retinopathy and diabetic macular oedema: pathogenesis and management

Systematic Review

San SC, Kulus MA, Ho A, Matthews DR. Diabetes Days Metab. 2019 Mar 21(3):454-466. doi: 10.1111/dme.14336. Epub 2019 Oct 15.

ARTICLE TYPE

- Address
- Autobiography
- Bibliography
- Biography
- Case Reports
- Clinical Article
- Clinical Conference
- Clinical Study
- Clinical Trial Protocol
- Clinical Trial, Phase I
- Clinical Trial, Phase II
- Clinical Trial, Phase III
- Clinical Trial, Phase IV
- Editorial
- Journal Article
- Lecture
- Legal Case
- Legislation
- Letter
- Multicenter Study
- News
- Newspaper Article
- Observational Study
- Observational Study, Veterinary
- Overall
- Patient Education Handout
- Periodical Index
- Review
- Systematic Review

San SC, Kulus MA, Ho A, Matthews DR. Diabetes Days Metab. 2019 Mar 21(3):454-466. doi: 10.1111/dme.14336. Epub 2019 Oct 15.

ARTICLE TYPE

- Child: birth-18 years
- Newborn: birth-1 month
- Infant: birth-23 months
- Infant: 1-23 months
- Preschool Child: 2-5 years
- Child: 6-12 years
- Adolescent: 13-18 years
- Adult: 19+ years
- Young Adult: 19-24 years
- Adult: 19-44 years
- Middle Aged + Aged: 45+ years
- Middle Aged: 45-64 years
- Aged: 65+ years
- 80 and over: 80+ years

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- Books and Documents
- Clinical Study
- Clinical Trial
- Meta-Analysis
- Practice Guideline
- Randomized Controlled Trial
- Review
- Systematic Review

04/12/2021

- 1 year
- 3 years
- 10 years
- Custom Range

04/12/2021

- English

04/12/2021

- Adult 19-44 years
- Adult 45 years
- Middle Aged - Aged 45+ years
- Young Adult 19-24 years

Additional filters

Clear all filters

Maternal complications in pregnancy with diabetes

3 Kulkarni V, Agarwal S  
1564 Med Res. 2017 Sept 15;36(9):1579-7  
DOI: 10.4236/1579-7

Free article

Maternal complications in pregnancy with diabetes: complications such as pre-eclampsia, cesarean delivery, postpartum hemorrhage, neonatal respiratory distress and increased neonatal morbidity. These can be minimized with optimal glycaemic control.

Worsening of diabetic retinopathy with rapid improvement in systemic glucose control: a review

4 Fan C, Basha MA, Wu A, Mathias DA  
Diabetes Care. 2017 May;40(5):688-90. doi: 10.2337/dci.170088. Epub 2016 Oct 17.  
PMID: 27522294

Free article

Worsening of diabetic retinopathy (DR) is associated with the initiation of effective treatment of glycaemia in some patients with diabetes. A link has been associated with risk factors such as poor blood glucose control and hypertension, and...

Diabetic retinopathy in pregnancy: a review

3 Mariani S, Hodgson LA, Liu LL, Al-Qurabi S  
Clin Exp Optom. 2016 Sep;94(9):811-8. doi: 10.1111/coo.12760. Epub 2016 May 17.  
PMID: 27192293

Free article

Diabetic retinopathy is a leading cause of blindness in women during their childbearing years and pregnancy increases the short-term risk of diabetic retinopathy progression. We examine the risk factors for progression of diabetic ret...

Diabetic retinopathy and diabetic macular oedema pathways and management

4 UK Consensus Working Group  
Annals NY Acad Sci. 2017;1406:1-10. doi: 10.1111/nyas.13201. Epub 2017 May 17.  
PMID: 28582820

Free article

The management of diabetic retinopathy (DR) has evolved considerably over the past decade, with the availability of new technologies (laser and photocoagulation, cryotherapy, vitrectomy and vitreal injections) and the use of intravitreal pharmacologic therapy. An overview of the...

Ophthalmic associations in pregnancy

7 Gil G, Clark C, Cooper B  
Aust J Opt. 2017; 46(1):1-10. doi: 10.1111/ajo.12558. Epub 2016 Sep 19. PMID: 27612244

Free article

BACKGROUND: A range of ocular pathways exists during pregnancy. Unlike pre-existing eye conditions,

PubMed.gov

diabetes OR "glycemic control" OR "blood glucose" OR hyperglycemia OR

Advanced | Create alert | Create RSS | User Guide

Save | Email | Send to | Sorted by Best match | Display options

LINK

275 results

Filters applied: Adult 19-44 years, Clear all

From Pre Diabetes to Diabetes: Diagnosis, Treatments and Translational Research

1 Research

1 Khan MM, Chou ZH, Xu X, Tang Y, Gao Z, Zhao Y  
Medicine (Baltimore). 2019 Aug 29;98(34):e16810. doi: 10.1097/MD.00000000000016810.  
PMID: 31455526

Free PMC article

Diabetes can be classified into three types, namely type 1 diabetes, type 2 diabetes mellitus (T2DM) and gestational diabetes. A glucometer is commonly used by diabetic patients to measure blood glucose levels with...

Diabetic retinopathy in pregnancy: a review

2 Mariani S, Hodgson LA, Liu LL, Al-Qurabi S  
Clin Exp Optom. 2016 Sep;94(9):811-8. doi: 10.1111/coo.12760. Epub 2016 May 17.  
PMID: 27192293

Review

Diabetic retinopathy is a leading cause of blindness in women during their childbearing years and pregnancy increases the short-term risk of diabetic retinopathy progression. We examine the risk factors for progression of diabetic ret...

Prevalence of diabetic retinopathy in the United States, 2005-2008

2 Zhang X, Saikawa H, Chou CF, Cook AD, Cheng Y, Geis LS, Gray DR, Albright AL, Klein BE, Klein R, JAMA. 2012 Aug 14;308(8):849-56. doi: 10.1001/jama.2012.1111.  
PMID: 22849104

Free PMC article

CONTEXT: The prevalence of diabetes in the United States has increased. People with diabetes are at risk for diabetic retinopathy. MAIN MESSAGE: MEASUREMENT: Diabetic retinopathy and vision-

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- Books and Documents
- Clinical Study
- Clinical Trial
- Meta-Analysis
- Practice Guideline

04/12/2021

Review of the management of sight-threatening diabetic retinopathy during pregnancy

Praveen Patel Deyo P, Narendranath ML, Dim P, Narendranath P, Man Lyn Catherine Barton P

Abstract

Diabetes mellitus (DM) is a noncommunicable disease reaching epidemic proportions around the world. It affects younger individuals, including women of childbearing age. Diabetes can cause diabetic retinopathy (DR), which is potentially sight-threatening when severe nonproliferative DR (NPDR), proliferative DR (PDR), or sight-threatening diabetic macular oedema (STME) develops. Pregnancy is an independent risk factor for the progression of DR. Diabetes DR at the onset of pregnancy is an important indicator of progression, with up to 10% of women with baseline NPDR progressing to PDR. Progression to sight-threatening DR (STDR) during pregnancy causes distress to the patient and often necessitates ocular treatment, which may have a systemic effect. Management includes pregnancy counselling and, when possible, conventional treatment prior to pregnancy. During pregnancy, closer follow-up is required for those with a long duration of DM, poor haemoglobin control of blood sugar and blood pressure, and worse DR, as these are risk factors for progression to STDR. Conventional treatment with anti-vascular endothelial growth factor agents for STDR can potentially lead to foetal loss. Treatment with laser photocoagulation may be preferred, and surgery under general anaesthesia should be avoided. This review provides a management plan for STDR from the perspective of practising ophthalmologists. A review of strategies for maintaining the sight of diabetic women with STDR with emphasis on pregnancy counselling and planning, monitoring and safe treatment during pregnancy, and management of complications is presented.

**Keywords:** Diabetic macular oedema. Proliferative photocoagulation. Pregnancy. Proliferative diabetic retinopathy. Severe nonproliferative diabetic retinopathy. Sight-threatening diabetic retinopathy.

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Conflict of interest statement

Conflict of interest statement: Man Lyn Catherine Barton has received fees for serving as a speaker and/or an advisory board member for Novartis, Allergan, and Santen. She received fees for writing as a speaker for Bayer and Allergan. She has received research funding from Allergan, Novartis, Santen, and...

Questions?



Thank you!  
Merci!  
ਧੰਨਵਾਦ !

Gurpreet K. Rana, MLIS  
preet@umich.edu