Information Skills Training

School of Nursing & Midwifery Information Skills

Searching using PubMed

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2008/2009
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Be aware that the number of articles in PubMed increases over time – it is likely the amount of results you get following these guidelines will be more than I found (searches ran in February 2008).
you are looking for articles on:

routine second trimester ultrasound in pregnancy
• Before we start searching we need to think of some keywords for this topic

• What are we talking about? Break up the search into its component parts... Use a textbook to find out more about these terms if you are not familiar with them
Example Keywords

- Pregnancy
- Antenatal/Prenatal
- Fetus (note US spelling)
- Ultrasound
- Routine
- Second Trimester
• In order for full-text links to work you *have* to go via the databases page on the TCD Library website - for instance, from the left-hand column on http://www.tcd.ie/Library/subjectguides/nursing/index.php

• If you want to be able to save results and searches online, sign into “My NCBI”. You can follow the directions in the presentation “Using My NCBI in PubMed” if you haven’t done this before
• We are going to search for all these different concepts individually. We can then put them together into a combined search. Our aim is to get about 50-200 results – that will hopefully include enough articles on our particular subject to be useful

• First off, let’s search for “pregnancy”
To get started with PubMed, enter one or more search terms.

Search terms may be topics, authors or journals.

Set up an automated PubMed update in fewer than five minutes.

1. Create a My NCBI account
2. Save your search
3. Your PubMed updates can be e-mailed directly to you.

Read the My NCBI Help material to explore other options, such as automated updates of other databases, setting search filters, and highlighting search terms.

PubMed is a service of the U.S. National Library of Medicine that includes over 17 million citations from MEDLINE and other life science journals for biomedical articles back to the 1950s. PubMed includes links to full text articles and other related resources.
• 634,914 results for that! So we know we have to narrow down our results somewhat. Again you will have more results than that as more articles are added all the time

• Now we’ll search for “antenatal”...
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- Advocating the new WHO antenatal care model in a free maternity care setting in a developing country.
- What is the place of the new WHO antenatal care model in a teaching hospital setting?
- Clinical care management of eclampsia: challenges in an African setting.
- Neonatal pulmonary sequestration: Clinical experience with transumbilical arterial embolization.
- Prenatal imaging of the fetal brain--indications and developmental implications of fetal MRI.
- Lynch CM, Steffen DL, Hertzen M, Mersman JH.
• ...and now “prenatal”
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• After you’ve run several searches you may want to see the results you got in your earlier ones, or combine two or more searches together

• This is done by clicking on the tab marked “History”. Your previous searches are shown, and you can rerun them or combine all the individual searches in different ways
<table>
<thead>
<tr>
<th>Search</th>
<th>Most Recent Queries</th>
</tr>
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<tbody>
<tr>
<td>#1</td>
<td>Search pregnancy</td>
</tr>
<tr>
<td>#2</td>
<td>Search antenatal</td>
</tr>
<tr>
<td>#3</td>
<td>Search prenatal</td>
</tr>
</tbody>
</table>

- Search History will be lost after eight hours of inactivity.
- Search numbers may not be continuous, all searches are represented.
- To save search indefinitely, click query # and select Save in My NCBI.
- To combine searches use #search, e.g., #2 AND #3 or click query # for more options.
• As “antenatal” and “prenatal” are synonyms – they describe the same concept – we want to see the articles that mention “antenatal” OR “prenatal” – some might mention both too
• To do this we need to combine them using OR
• First I’ll click “Clear” at the top (NOT “Clear History” at the bottom!) then click on the “hash number” next to “antenatal” – that’s #2 in my case - and select “OR”. Now I’ll click on the hash number next to “prenatal” – so #3 - and select “OR” again. Clicking “Preview” at the top shows me how many results I get
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Searching using PubMed

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<table>
<thead>
<tr>
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<th>Time</th>
<th>Result</th>
</tr>
</thead>
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<td>#1</td>
<td>Search pregnancy</td>
<td>04:44:18</td>
<td>634914</td>
</tr>
<tr>
<td>#2</td>
<td>Search antenatal</td>
<td>04:44:58</td>
<td>15060</td>
</tr>
<tr>
<td>#3</td>
<td>Search prenatal</td>
<td>04:45:19</td>
<td>92843</td>
</tr>
<tr>
<td>#4</td>
<td>Search (#2 OR (#3)</td>
<td>04:45:46</td>
<td>160697</td>
</tr>
</tbody>
</table>
• Once I know how many results there are for “antenatal” OR “prenatal” – the results are now listed as search #4 - I can now add the “pregnancy” part to that combined search

• It’s always best to click “Clear” between combining searches

• As I want it to mention all the results in #4 AND “pregnancy”, I click on the hash number next to the combined search and select AND. Then I do the same for “pregnancy” (#1 for me). Then click “Preview”
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Searching using PubMed
• You can now carry on searching for your other terms – click “Clear” first then enter the next term

• Then either click “Go” to be taken to the list of results, or “Preview” to stay on this page and just see how many results you get
• Try searching for “fetus”, “ultrasound” and “routine” – do each search individually. Remember to click “Clear” between each search.
• Our final part is “second trimester”. Enter it in quotes as above, which is the way to find a particular phrase
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**Searching using PubMed**

- Search History will be lost after eight hours of inactivity.
- Search numbers may not be continuous, all searches are represented.
- To save search indefinitely, click query # and select Save in My NCBI.
- To combine searches use `&search`, e.g., `#2 AND #3` or `#1 OR (#2 OR #3)` for more options.

<table>
<thead>
<tr>
<th>Search</th>
<th>Most Recent Queries</th>
<th>Time</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>#2</td>
<td>Search &quot;second trimester&quot;</td>
<td>05:05:44</td>
<td>7634</td>
</tr>
<tr>
<td>#3</td>
<td>Search routine</td>
<td>05:05:31</td>
<td>122281</td>
</tr>
<tr>
<td>#4</td>
<td>Search ultrasound</td>
<td>05:05:19</td>
<td>463255</td>
</tr>
<tr>
<td>#5</td>
<td>Search fetus</td>
<td>05:02:20</td>
<td>146889</td>
</tr>
<tr>
<td>#6</td>
<td>Search (#4) AND (#1)</td>
<td>04:46:09</td>
<td>82316</td>
</tr>
<tr>
<td>#7</td>
<td>Search (#2) OR (#3)</td>
<td>04:45:46</td>
<td>108897</td>
</tr>
<tr>
<td>#8</td>
<td>Search prenatal</td>
<td>04:45:19</td>
<td>92849</td>
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<tr>
<td>#9</td>
<td>Search antenatal</td>
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<td>#10</td>
<td>Search pregnancy</td>
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<td>634914</td>
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</tbody>
</table>

Write to the Help Desk

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Department of Health & Human Services

Privacy Statement | Freedom of Information Act | Disclaimer
• Now we can put our final four searches together using AND by clicking on the hash numbers
Searching using PubMed

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- Search numbers may not be continuous; all searches are represented.
- To save search indefinitely, click query # and select Save in My NCBI.
- To combine searches use #search, e.g., #2 AND #3 or click query # for more options.

<table>
<thead>
<tr>
<th>Search</th>
<th>Most Recent Queries</th>
</tr>
</thead>
</table>
| #10 Search ([(#6 AND (#7) AND (#8)) AND (#9) | 05:11.96 82
| #9 Search "second trimester" | 05:05.44 7634
| #8 Search routine | 05:05.31 122881
| #7 Search ultrasound | 05:05.19 283251
| #6 Search fetus | 05:02.20 149688
| #5 Search (#4) AND (#1) | 04:46.93 92816
| #4 Search (#2) OR (#3) | 04:45.46 100697
| #3 Search prenatal | 04:45.19 92843
| #2 Search antenatal | 04:44.58 150660
| #1 Search pregnancy | 04:44.18 634914

Write to the Help Desk
NCBI | NHLBI | NIH
Department of Health & Human Services
Privacy Statement | Freedom of Information Act | Disclaimer
• So that gives us a new number, #10 for me. We can now add the two combined searches we have run together to give us a final search – #11

• In effect we have just searched for:
  pregnancy AND (antenatal OR prenatal) AND fetus AND ultrasound AND routine AND "second trimester"
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Searching using PubMed

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- To save search indefinitely, click query # and select Save in My NCBI.
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<table>
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<td>Search ((#5) AND (#10))</td>
</tr>
<tr>
<td>#10</td>
<td>Search (((#6) AND (#7)) AND (#8)) AND (#9)</td>
</tr>
<tr>
<td>#9</td>
<td>Search &quot;second trimester&quot;</td>
</tr>
<tr>
<td>#8</td>
<td>Search routine</td>
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<tr>
<td>#7</td>
<td>Search ultrasound</td>
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<td>Search fetus</td>
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<td>#1</td>
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<table>
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<tr>
<th>Time</th>
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<td>05:12:40</td>
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<td>05:11:36</td>
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<td>05:05:31</td>
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<td>05:02:20</td>
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<tr>
<td>04:46:69</td>
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<td>04:45:46</td>
<td>100997</td>
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<td>04:44:58</td>
<td>15064</td>
</tr>
<tr>
<td>04:44:18</td>
<td>634914</td>
</tr>
</tbody>
</table>

Write to the Help Desk
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Department of Health & Human Services
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• 77 results now that mention all our search terms in the way we want – which is much more manageable

• Click on the number of results (i.e., here it’s 77 under the column “Result”) to see the list of articles

• 9 of these are review articles – a review is an analysis of multiple sources of information/knowledge on a particular topic
Searching using PubMed

1. Isolated fetal intracardiac hyperechogenic focus associated with neonatal outcome and triple test results.
   - PMID: 17496666 [PubMed - indexed for MEDLINE]

2. [Vasa previa: one case]
   - PMID: 17381277 [PubMed - indexed for MEDLINE]

3. Fetal anomaly scan potentially will replace routine AFAFF assays for the detection of neural tube defects.
   - PMID: 17154277 [PubMed - indexed for MEDLINE]

4. Information, knowledge and expectations of the routine ultrasound scan.
   - PMID: 17011888 [PubMed - indexed for MEDLINE]

5. Accuracy of second trimester fetal head circumference and biparietal diameter for predicting the time of spontaneous birth.
   - PMID: 16643228 [PubMed - indexed for MEDLINE]

   - PMID: 16922813 [PubMed - indexed for MEDLINE]

   - PMID: 27441607 [PubMed - indexed for MEDLINE]

   - PMID: 27319725 [PubMed - indexed for MEDLINE]
• The more keywords you link together with AND, the more specific your search is – that is, the more likely the results are to be on your particular topic.

• However, it is also likely you will exclude some relevant articles, because they are missing one or other of the keywords you have used – be aware of this if using large numbers of keywords.
• Now that we know how many results we have we can get rid of some we are definitely not interested in...

• One way is to click on the “Limits” tab and get rid of any non-English papers, or ones which are about animals. Then click “Go” to rerun the search
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Searching using PubMed
• Doing this knocks out a few results, so we are now down to 69 articles. Then you can scroll down and see which articles may be of some use by looking at the title, and select them by ticking the box next to the authors’ names.

• By default the articles are listed with the most recent first.

• Look out for any authors or journals you know to be good on this subject.
Searching using PubMed

- Isolated fetal ultrasound hyperechogenic focus associated with neonatal outcome and triple test results.
- Fetal anomaly scan potentially will replace routine AFEF assays for the detection of neural tube defects.
- Information, knowledge and expectations of the routine ultrasound scan.
- Accuracy of second trimester fetal head circumference and biparietal diameter for predicting the time of spontaneous birth.
- Fetal sonographic diagnosis of congenital penile skin tag: case report and review of the literature.
- Velamentous insertion of the umbilical cord: a first-trimester sonographic screening study.
• Hmm, this one by Lalor and Devane looks interesting, let’s tick that...
• Select any articles that look good from the title. We can put all of these together in one place to look through in more detail, by going to the “Send to” box near the top and choosing “Clipboard”
Searching using PubMed

1. Information Skills Training
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2. PubMed
   - All Databases
   - PubMed
   - Limits: Humans, English
   - Display: Summary
   - Show: 20
   - Sort By: Title
   - Clipboard

3. Results:
   - 1. Amole R. Sayin MC. Nwokl FC. Shit H.
      - Isolated fetal cardiac hyperechoic focus associated with neonatal outcome and triple test results.
      - PMID: 17466665 [PubMed - indexed for MEDLINE]

4. Related Articles, Links

---

Trinity College Library Dublin
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Searching using PubMed
• It will tell you how many results it has added to the Clipboard. You can keep adding things to the Clipboard in this search, or any other searches you run in this session. Don’t worry about putting the same thing in twice, as it will only add “new” results so you don’t get duplicates.
Searching using PubMed

1 item was added to Clipboard

Isolated fetal intracardiac hyperechogenic focus associated with neonatal outcome and triple test results.

Ardia S, Saini NC, Varol FG, Sues M.

PMID: 17426666 [PubMed - indexed for MEDLINE]

Fetal anomaly scan potentially will replace routine APTT assays for the detection of neural tube defects.

Kuiper AJ, de Brauwe I, van Ravenzwaaij-Arias CM, Pass BH, Cremera JW, Thomas CB, Smits AP.

PMID: 17154337 [PubMed - indexed for MEDLINE]

Information, knowledge and expectations of the routine ultrasound scan.

PMID: 1701188 [PubMed - indexed for MEDLINE]

Accuracy of second trimester fetal head circumference and biparietal diameter for predicting the time of spontaneous birth.

Johnson SL, Ramsesma S, Sellman R, Kavanagh T.

PMID: 16982322 [PubMed - indexed for MEDLINE]

Fetal ultrasonic diagnosis of congenital perineal skin tag: case report and review of the literature.

PMID: 16982323 [PubMed - indexed for MEDLINE]

Serna, W.
• When you have found all the results that look interesting, you can click on “Clipboard” at the top to see these results. I’ve just done it with a few as examples – hopefully you will have a lot more!
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Searching using PubMed

- The Clipboard will hold a maximum of 500 items.
- Clipboard items will be lost after eight hours of inactivity.
- To save items indefinitely, use Send to My NCBI Collections.

Items 1 - 5 of 5

1. Lator JL, Devanar D.
   Information, knowledge and expectations of the routine ultrasound scan.
   PMID: 17011105 [PubMed - indexed for MEDLINE]

2. Lator JL, Basley C.
   Fetal anomaly screening: what do women want to know?
   PMID: 16708735 [PubMed - indexed for MEDLINE]

3. Haldane J, Barka B.
   Adverse obstetric outcome in fetuses that are smaller than expected at second trimester routine ultrasound examination.
   PMID: 12225310 [PubMed - indexed for MEDLINE]

4. Roberts T, Mapstone M, Piery J.
   Choosing options for ultrasound screening in pregnancy: and comparing cost effectiveness: a decision analysis approach.
   PMID: 9793046 [PubMed - indexed for MEDLINE]

5. VanDorsten JP, Kolber TG, Newman PE, Mensah MK.
   Fetal anomaly detection by second-trimester ultrasonography in a tertiary center.
   PMID: 9879438 [PubMed - indexed for MEDLINE]

Write to the Help Desk
NCBI@NIH
• You can now take a closer look at these articles, by clicking on the authors’ names. Let’s see what the first one is like...
Information, knowledge and expectations of the routine ultrasound scan.

Lalor JG, Devane D.
School of Nursing and Midwifery, University of Dublin, Trinity College Dublin, 24 O’Lear Street, Dublin 2, Ireland. j.lalor@tcd.ie

OBJECTIVE: To examine the current provision of pre-ultrasound information to women; to determine if the information provided was related to women's knowledge of the routine second trimester ultrasound; and to describe women's expectations of the scan. DESIGN: A descriptive survey, before and after design. SETTING: Tertiary referral centre in the Republic of Ireland. PARTICIPANTS: A convenience sample of pregnant women attending for routine second trimester ultrasound scan. MEASUREMENTS: Self-report questionnaires were used to explore the availability of information about the test, the extent of women's knowledge and expectations of the examination, and the degree to which expectations were achieved. FINDINGS: Most women received little information from health professionals about the capability and limitations of the scan, and had expectations that exceeded the purpose and ability of the examination. Most women, however, stated that their expectations were met in most cases. Although the routine ultrasound in the study site is not a targeted fetal anatomical survey, most women were concerned with this aspect of the test. KEY CONCLUSIONS: If women are to have realistic expectations of the routine ultrasound scan, then improvements are required in the provision of pre-ultrasound information, particularly in relation to the technological limitations of the examination. Consideration should be given to the context of the high appeal associated with visualising the fetus for women when unachievable expectations are reported as having been met. IMPLICATIONS FOR PRACTICE: Any development of prenatal screening programmes that will uncover fetal abnormalities needs to be considered in context, in particular when termination of pregnancy is not available within the jurisdiction. Women had expectations of the examination that could not, because of technological limitations, have been met by the examination, but which they perceived to have been met. Knowledge of the purpose, capabilities and limitations of the routine second trimester ultrasound scan was not influenced by the mode of information provision.

PMID: 17011008 [PubMed - indexed for MEDLINE]
• This looks pretty useful – can I read the whole thing?

• At the top right is a little icon saying “Elsevier Full-Text Article” (Elsevier are the company who publish this particular journal). If you are logged in as being Trinity, and we have a subscription to that journal, clicking it SHOULD get the full text.
Information, knowledge and expectations of the routine ultrasound scan.

Lalor JG, Devane D.

School of Nursing and Midwifery, University of Dublin, Trinity College Dublin, 24 O’Donnell Street, Dublin 2, Ireland. jialalor@tcd.ie

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PMID: 17011008 [PubMed - indexed for MEDLINE]
• HOWEVER not all articles have that link at the top. This doesn’t *necessarily* mean that TCD don’t have it; PubMed covers thousands of journals and they don’t put in a link for all of them. In that case, check the TCD Catalogue under “Periodicals” – we may have it anyway. We should definitely have any British or Irish journals in print form for you to photocopy
• Clicking on that link *does* give us the full text. The “Full Text + Links” version is fine to read on screen; if you want to print it or save it to a memory stick then click on “PDF” – this looks exactly like the article did in the printed journal.
Information, knowledge and expectations of the routine ultrasound scan

Joan G. L alter MSc, PGDipHSE, PGDip(Stats), RGN, RGN(RSCN), RNT, BNS
HRB Clinical Midwifery Fellow and Doctoral Student and Deean Devane BSc(Hons), MSc, PgDip(Stats),
RGN, RGN, RNT*, Doctoral Student Midwifery Research Assistant.

School of Nursing and Midwifery, University of Dublin, Trinity College Dublin, 24 O’D“iier Street, Dublin 2, Ireland
Received 5 September 2005; revised 13 February 2006; accepted 22 February 2006. Available online 26 September 2006.

Abstract

Objective
to examine the current provision of pre-ultrasound information to women; to determine if the
information provided was related to women’s knowledge of the routine second trimester ultrasound;
and to describe women’s expectations of the scan.

Design
a descriptive survey, before and after design.

Setting
A tertiary referral centre in the Republic of Ireland

Participants
A convenience sample of pregnant women attending for routine second trimester ultrasound
scans.
• Reading the references at the end may give you some other articles that look interesting. You can go into the TCD Catalogue later and see if we hold those journals too!
• Click back into the PubMed window where the abstract for the article is still open. Now we know we like this, we can see what other papers PubMed thinks are about the same things by clicking “See all Related Articles”. There might be quite a lot!
Information, knowledge and expectations of the routine ultrasound scan.

Lalar IG, Devane D.

School of Nursing and Midwifery, University of Dublin, Trinity College Dublin, 24 O’Connell Street, Dublin 2, Ireland. jilar@tcd.ie

OBJECTIVE: To examine the current provision of pre-ultrasound information to women, to determine if the information provided was related to women's knowledge of the routine second trimester ultrasound, and to describe women’s expectations of the scan. DESIGN: A descriptive survey, before and after design. SETTING: Tertiary referral centre in the Republic of Ireland. PARTICIPANTS: A convenience sample of pregnant women attending for routine second trimester ultrasound scan. MEASUREMENTS: Self-report questionnaires were used to explore the availability of information about the test, the extent of women's knowledge and expectations of the examination, and the degree to which expectations were achieved. FINDINGS: Most women received little information from health professionals about the capability and limitations of the scan, and had expectations that exceeded the purpose and ability of the examination. Most women, however, stated that their expectations were met in most cases. Although the routine ultrasound in the study site is not a targeted fetal anatomical survey, most women were concerned with this aspect of the test. KEY CONCLUSIONS: If women are to have realistic expectations of the routine ultrasound scan, then improvements are required in the provision of pre-ultrasound information, particularly in relation to the technological limitations of the examination. Consideration should be given to the context of the high appeal associated with visualising the fetus for women when unachievable expectations are reported as having been met. IMPLICATIONS FOR PRACTICE: Any development of prenatal screening programmes that will uncover fetal abnormalities needs to be considered in context, in particular when termination of pregnancy is not available within the jurisdiction. Women had expectations of the examination that could not, because of technological limitations, have been met by the examination, but which they perceived to have been met. Knowledge of the purpose, capabilities and limitations of the routine second trimester ultrasound scan was not influenced by the mode of information provision.

PMID: 17811009 (PubMed - indexed for MEDLINE)
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<td>Information, knowledge and expectations of the routine ultrasound</td>
<td>Lalois DG, Devane D.</td>
</tr>
<tr>
<td></td>
<td>PMID: 17011880 [PubMed] - indexed for MEDLINE.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Unexpected diagnosis of fetal abnormality: women's encounters with</td>
<td>Lalois DG, Devane D., Bagley CM</td>
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<td>caregivers.</td>
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<td>PMID: 17324182 [PubMed] - indexed for MEDLINE.</td>
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<td>Perception of information, expectations and experiences among</td>
<td>Buenas RP, Periñán C, Gilán de las Heras L, Saldana PO.</td>
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<td>women and their partners attending a second-trimester routine</td>
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<td>Laster T, Kyrouz TH, Bihm M, Svedenius L, Tammir L.</td>
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<td>background knowledge, expectations, experiences and acceptances.</td>
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<td>Georgeson Chimpan S, Dalire E, Rowena C, Waldron K. F.</td>
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<td>baby? A randomized controlled trial of ultrasound screening for</td>
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<td>Drysdale K, Ridley D, Walker K, Higginson B, Dean T.</td>
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<td>risk and abnormal pregnancies in a district general hospital setting</td>
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</table>
• 749 is too much to look through, but unfortunately you can’t easily put “Limits” on this search from this page (you have to register to use the “My NCBI” feature and add “filters”). One idea would be to click the “Review” tab to just see those sorts of articles... but that will only show articles analysing others’ research
• Remember you don’t have to build these searches up again from scratch if you want to rerun them – use the History tab...
Information Skills Training

S of N & M Student Information Skills

Searching using PubMed

- Search History will be lost after eight hours of inactivity.
- Search numbers may not be continuous, all searches are represented.
- To save search indefinitely, click query # and select Save in My NCBI.
- To combine searches use #search, e.g., #2 AND #3 or click query # for more options.

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</table>

Write to the Help Desk

NCBI | NLM | NIH
Department of Health & Human Services
Privacy Statement | Freedom of Information Act | Disclaimer
• When you’re done you can click on Clipboard and see all the results you’ve selected. Clicking on “Send to” gives you various choices about what to do with these results...

• For example, you can print your results list, or save it to a memory stick. Clicking on “E-mail” gives you this page:
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Searching using PubMed

- Select options, enter recipient's e-mail address, and click Mail.

Select 5 document(s)
Format: Summary as HTML
Sorting: Sort By
Start with item 1 send 20 of 5

Your name or additional text (optional)

E-mail

*SPAM* filtering software notice
• Type in your e-mail address and make sure it is sending all your results – not just the first 20. Leave the format as “HTML”

• A little while later it will show up in your Inbox – it might take 5 minutes or so

• The authors’ names are still links like in PubMed – so if you click them you can go back to the summary in PubMed and click on any full text links!
Another way to search

• The way we have looked for keywords so far hasn’t specified where in the “record” for the article we want it to search

• However, another method only looks for terms we specify where they are one of the “subjects” of the article. This is called “subject heading searching”
• The people at PubMed have looked at all the articles and decided “this article is about X, Y and Z” – they have a standardised list of phrases they use. The article itself doesn’t have to use the same wording, but it has to be about the same concepts.

• So if you can find out what subject headings PubMed uses, it *should* give you all the articles on that subject...
• In PubMed this is called a “MeSH search” – MeSH stands for Medical Subject Headings. So first we need to find out what these terms are. This is quite easy if you have already found an article which is on your topic. If you haven’t found such a paper yet, you can click on “MeSH Database” and search for your terms.
• Find the article summary again – you might have added it to your Clipboard

• At the top left is a box with “Display” next to it – by default it says “AbstractPlus”. Change that it “Citation”
Information, knowledge and expectations of the routine ultrasound scan.

Labor JG, Devene D.

School of Nursing and Midwifery, University of Dublin, Trinity College Dublin, 24 D’Olier Street, Dublin 2, Ireland, ljlabor@tcd.ie

OBJECTIVE: To examine the current provision of pre-ultrasound information to women; to determine if the information provided was related to women’s knowledge of the routine second trimester ultrasound; and to describe women’s expectations of the scan. DESIGN: A descriptive survey, before and after design. SETTING: Tertiary referral centre in the Republic of Ireland. PARTICIPANTS: A convenience sample of pregnant women attending for routine second trimester ultrasound scan. MEASUREMENTS: Self-report questionnaires were used to explore the availability of information about the test, the extent of women’s knowledge and expectations of the examination, and the degree to which expectations were achieved. FINDINGS: Most women received little information from health professionals about the capability and limitations of the scan, and had expectations that exceeded the purpose and ability of the examination. Most women, however, stated that their expectations were met in most cases. Although the routine ultrasound in the study site is not a targeted fetal anatomical survey, most women were concerned with this aspect of the test. KEY CONCLUSIONS: If women are to have realistic expectations of the routine ultrasound scan, then improvements are required in the provision of pre-ultrasound information, particularly in relation to the technological limitations of the examination. Consideration should be given to the context of the high appeal associated with visualising the fetus for women when unachievable expectations are reported as having been met. IMPlications FOR PRACTICE: Any development of prenatal screening programmes that will uncover fetal abnormalities needs to be considered in context, in particular when termination of pregnancy is not available within the jurisdiction. Women had expectations of the examination that could not, because of technological limitations, have been met by the examination, but which they perceived to have been met. Knowledge of the purpose, capabilities and limitations of the routine second trimester ultrasound scan was not influenced by the mode of information provision.

PMID: 17081088 [PubMed - indexed for MEDLINE]
• On the page that comes up scroll down until you see the section called “MeSH Terms”. This is a list of the subject headings
Lalor JG, Devane D

School of Nursing and Midwifery, University of Dublin, Trinity College Dublin, 24 D'Olier Street, Dublin 2, Ireland. jlaro@tcd.ie

OBJECTIVE: To examine the current provision of pre-ultrasound information to women; to determine if the information provided was related to women's knowledge of the routine second trimester ultrasound; and to describe women's expectations of the scan. DESIGN: A descriptive survey, before and after design. SETTING: Tertiary referral centre in the Republic of Ireland. PARTICIPANTS: A convenience sample of pregnant women attending for routine second trimester ultrasound scan. MEASUREMENTS: Self-report questionnaires were used to explore the availability of information about the test, the extent of women's knowledge and expectations of the examination, and the degree to which expectations were achieved. FINDINGS: Most women received little information from health professionals about the capability and limitations of the scan, and had expectations that exceeded the purpose and ability of the examination. Most women, however, stated that their expectations were met in most cases. Although the routine ultrasound in the study site is not a targeted fetal anatomical survey, most women were concerned with this aspect of the test. KEY CONCLUSIONS: If women are to have realistic expectations of the routine ultrasound scan, then improvements are required in the provision of pre-ultrasound information, particularly in relation to the technological limitations of the examination. Consideration should be given to the content of the high appeal associated with visualising the fetus for women when unachievable expectations are reported as having been met. IMPLICATIONS FOR PRACTICE: Any development of prenatal screening programmes that will uncover fetal abnormalities needs to be considered in context, in particular when termination of pregnancy is not available within the jurisdiction. Women had expectations of the examination that could not, because of technological limitations, have been met by the examination, but which they perceived to have been met. Knowledge of the purpose, capabilities and limitations of the routine second trimester ultrasound scan was not influenced by the mode of information provision.

MeSH Terms:
- Adult
- Congenital Abnormalities/ultrasound
- Female
- Health Knowledge, Attitudes, Practice*
- Humans
- Ireland
- Patient Acceptance of Health Care/Psychology*
- Patient Education as Topic/methods
- Pregnancy
- Pregnancy Complications/ultrasound
- Pregnancy Trimester, Second
- Prenatal Care/methods*
- Questionnaires
- Self Efficacy
- Ultrasound, Prenatal/psychology*
- Women's Health

PMID: 17011088 [PubMed - indexed for MEDLINE]
• You can look at these and see if any relate to your topics – not all will. It’s best to run a search for one of these things at a time and then combine them later. If you click on one that looks useful and choose “MeSH” it will take us to the subject headings page. I chose “Ultrasonography, Prenatal”
### Searching using PubMed

#### 1: Ultrasoundography, Premnatal

The visualization of tissues during pregnancy through recording of the echoes of ultrasonic waves directed into the body. The procedure may be applied with reference to the mother or the fetus and with reference to organs or the detection of maternal or fetal disease.

*Year introduced: 1991*

#### 2: Nuchal Translucency Measurement

A prenatal ultrasonic measurement of the thickness or translucent area below the Skin in the back of the fetal NECK, or nape of the neck, during the first 14 weeks of gestation (PREGNANCY TRIMESTER, FIRST). Abnormal thickness of nuchal translucency measurements resulting from fluid collection is associated with increased risks of CHROMOSOME ABNORMALITIES. (Nicolades et al., 1992)

*Year introduced: 2005*
• There might be more than one subject term that comes up on this page – and more than one might be of use. Select the ones that you are interested in by ticking them, then click on “Send to” and select “Search Box with OR” – it’s really important to use “OR” if you have ticked more than one here

• I’m just interested in one at this stage...
"Ultrasoundography, Prenatal"

1. Ultrasoundography, Prenatal
   The visualization of tissues during pregnancy through recording of the echoes of ultrasonic waves directed into the body. The procedure may be applied with reference to the mother or the fetus and with reference to organs or the detection of maternal or fetal disease.
   Year introduced: 1991

2. Nuchal Translucency Measurement
   A prenatal ultrasonic measurement of the thickness or translucent area below the skin in the back of the fetal NECK, or nape of the neck, during the first 11-14 weeks of gestation (PREGNANCY TRIMESTER, FIRST). Abnormal thickness or nuchal translucency measurements resulting from fluid collection, is associated with increased risks of CHROMOSOME ABNORMALITIES (Nicolae et al., 1992)
   Year introduced: 2005
...and on the next page click “Search PubMed”
### Searching using PubMed

- **Search Term**: "Ultrasoundography, Prenatal"

#### Results:

1. **Ultrasoundography, Prenatal**
   - Description: Visualization of tissues during pregnancy through recording of the echoes of ultrasonic waves directed into the body. The procedure may be applied with reference to the placenta or the fetus and with reference to organs or the detection of maternal or fetal disease.
   - Year introduced: 1991

2. **Nuchal Translucency Measurement**
   - Description: A prenatal ultrasonic measurement of the thickness or translucent area below the SKIN in the back of the fetal NECK, or nape of the neck, during the first 11-14 weeks of gestation (PREGNANCY TRIMESTER, FIRST). Abnormal thickness or nuchal translucency measurements resulting from fluid collection, is associated with increased risks of CHROMOSOME ABNORMALITIES. (Nicolaides et al, 1992)
   - Year introduced: 2005
• This may well give you many hits – I got 17596 articles for the term “Ultrasonography, Prenatal”!
• Don’t bother trying to go through these now, but instead go back into the article (from the Clipboard), change it to Citation view, and repeat the above steps to search for another topic. Repeat for all the relevant topics!
• I did this to get all the MeSH results for “Pregnancy Trimester, Second” (9679!). I now need to combine the two searches

• As before, this is done by clicking on the tab marked History
Information Skills Training

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Searching using PubMed

• Search History will be lost after eight hours of inactivity.
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• To save search indefinitely, click query # and select Save in My NCBI.
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05:20:52  60
05:15:25  77
05:11:36  82
05:05:44  7624
05:05:31  132581
05:05:19  283255
05:02:20  149859
04:34:09  83216
04:45:46  10897
04:45:19  28483
04:44:58  15060
04:44:18  624814
05:37:00  3
• I want to find the articles that are about the subjects "Ultrasonography, Prenatal" AND "Pregnancy Trimester, Second". On the History page these are marked "#16" and "#18" – your numbers may be different
• Combine them as before using AND...
Information Skills Training

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Searching using PubMed

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• This gives 1612 results – too many to look through. So first we’ll click on limits and get rid of non-English and animal-related articles. This gives 1396 articles – 126 are reviews. It’s still too many original articles, so we need to narrow it down further

• Now type the word “routine” at the end of the search box and then click Go...
• ...which gives a manageable amount of 164, for you to look through, add to the Clipboard as you wish, then email, print etc as demonstrated earlier