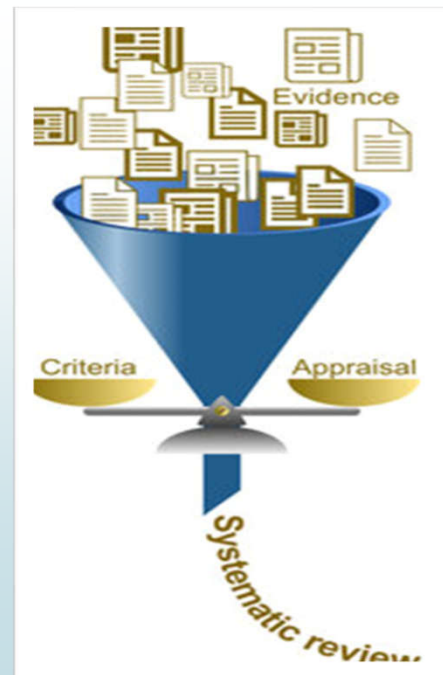


Advanced Search in Systematic Reviews

Fatemeh Sadeghi-Ghyassi, PhD

Iranian Center for EBM



1

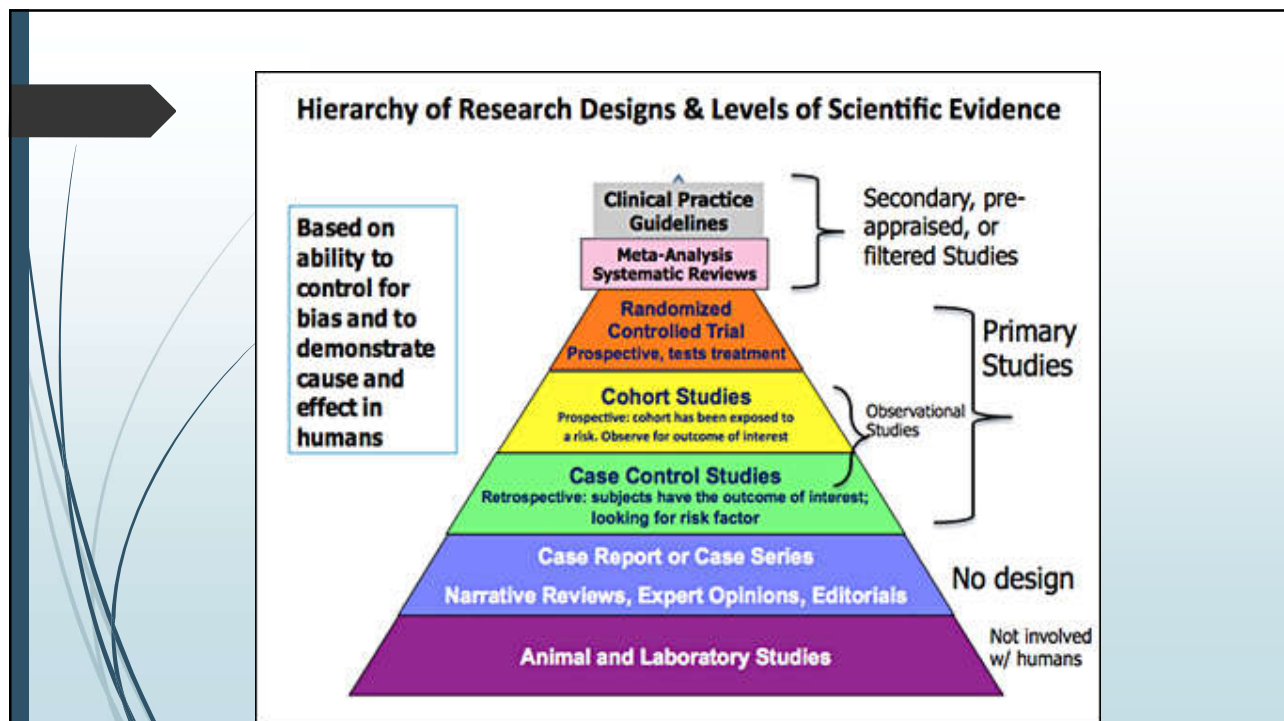
آنچه آموختیم

- مرور نظام مند
- سایر انواع مرورها
- جستجوی نظام مند
- سوال قابل پاسخ

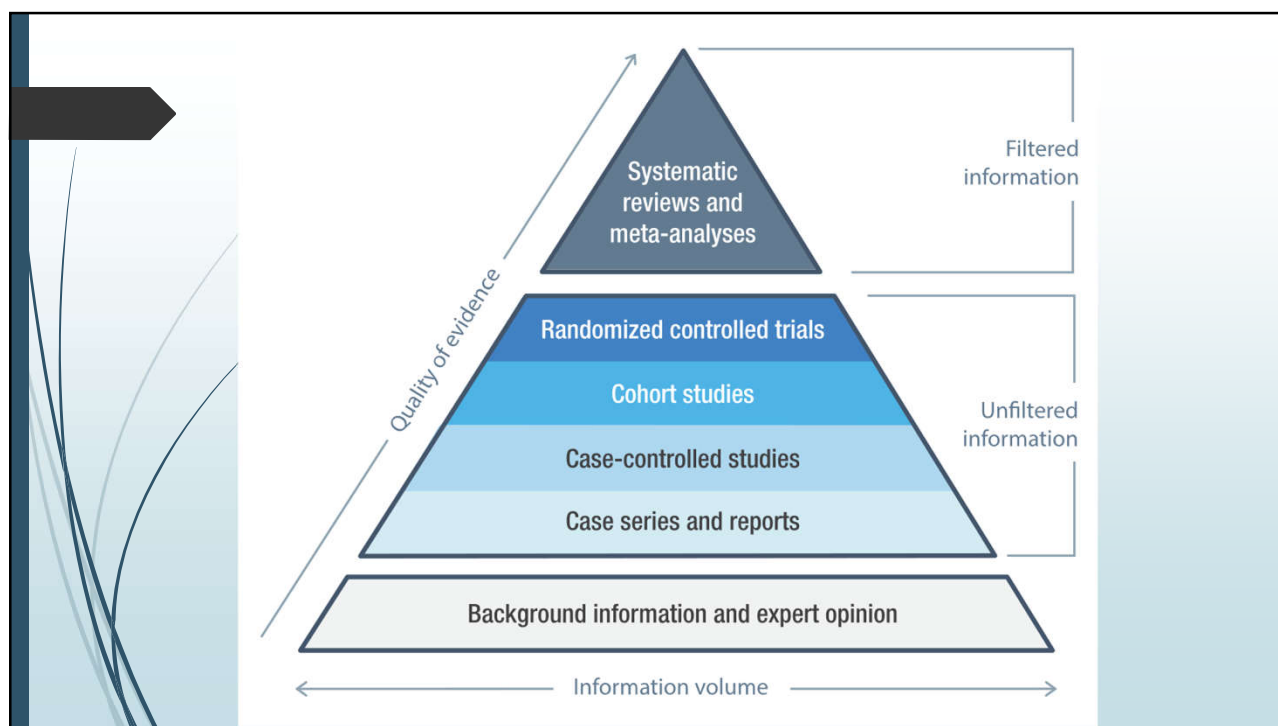
2

سطح بندی شواهد

3



4

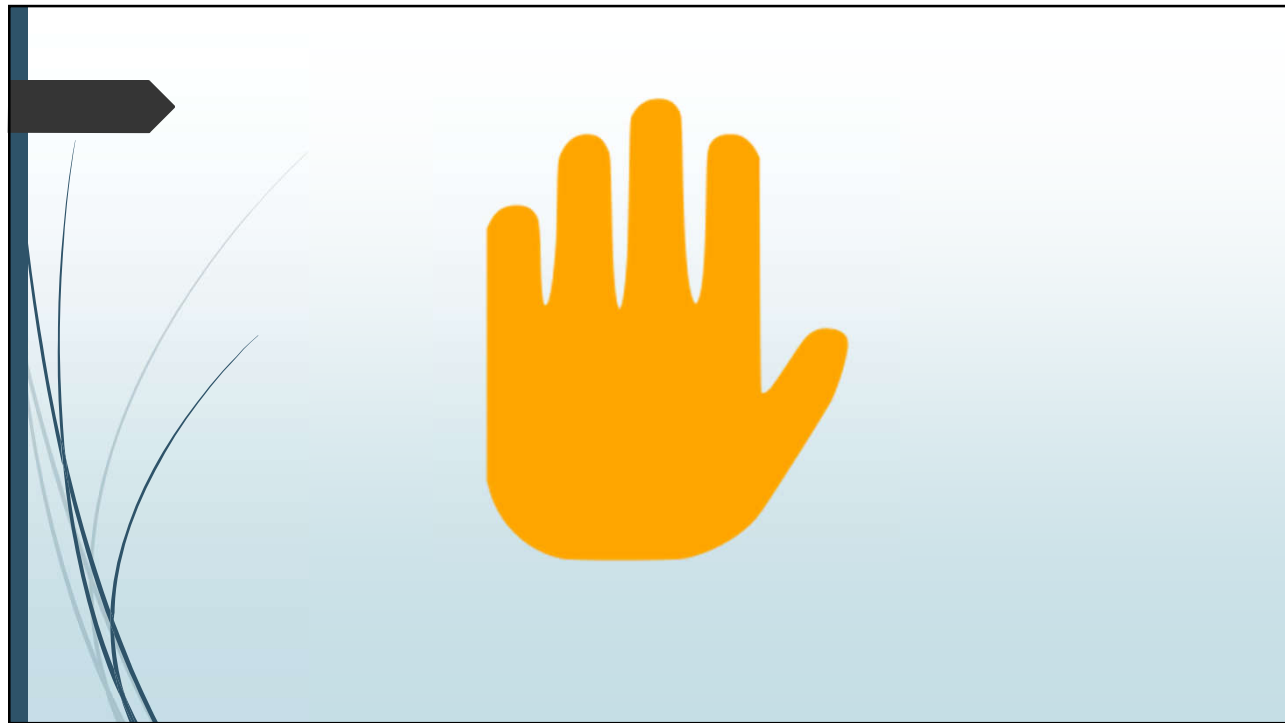


5



شروع جستجو برای مطالعات موجود

6



7

یک سوال مهم

آیا قبلاً در این موضوع مرور نظام مند دیگری انجام گرفته است؟

8

جستجو برای مرورهای نظام مند قبلی

○ جستجو برای مرورهای نظام مند احتمالی

○ جستجو در:

Pubmed ✓

Embase ✓

Cochrane Library ✓

Google Scholar ✓

9

جستجو برای مرورهای نظام مند قبلی

○ محدود کردن جستجو به مطالعات Meta-analysis و Systematic Review

✓ در پایگاههایی مثل Embase و Pubmed

✓ در پایگاههای اختصاصی جستجوی مرورهای نظام مند مانند Cochrane نیاز نیست

○ اضافه کردن کلید واژه "systematic review" و معادلهای آن (در Google Scholar)

10

مثال جستجو در Pubmed

PubMed.gov

(Intravascular ultrasound OR IVUS) AND cost-effective*

Advanced Create alert Create RSS User Guide

Save Email Send to Sorted by: Best match Display options

ARTICLE TYPE

- ☐ Books and Documents
- ☐ Clinical Trial
- ☒ Meta-Analysis
- ☐ Randomized Controlled Trial
- ☐ Review
- ☒ Systematic Review

MY NCBI FILTERS

RESULTS BY YEAR

2000 2020

TEXT AVAILABILITY

- ☐ Abstract
- ☐ Free full text
- ☐ Full text

2 results

Filters applied: Meta-Analysis, Systematic Review. [Clear all](#)

1 The role of **intravascular ultrasound** in lower limb revascularization in patients with peripheral arterial disease.

Cite Makris GC, Chrysafi P, Little M, Patel R, Bratby M, Wigham A, Anthony S, Uberoi R. Int Angiol. 2017 Dec;36(6):505-516. doi: 10.23736/S0392-9590.17.03866-4. Epub 2017 Sep 11. PMID: 28895369 **Free article**. Review.

INTRODUCTION: The aim of this review is to explore the safety and **effectiveness** of **intravascular ultrasound (IVUS)** during lower limb endovascular interventions in patients with peripheral arterial disease (PAD). ...CONCLUSIONS: There is limited and het ...

2 **Intravascular ultrasound-guided interventions in coronary artery disease: a systematic literature review, with decision-analytic modelling, of outcomes and cost-effectiveness.**

Cite Berry E, Kelly S, Hutton J, Lindsay HS, Blaxill JM, Evans JA, Connelly J, Tisch J, Walker GC,

11

مثال جستجو در Google Scholar

Google Scholar

"Intravascular ultrasound" AND cost-effective* AND "systematic review"

Articles About 1,210 results (0.07 sec)

Any time

- Since 2020
- Since 2019
- Since 2016
- Custom range...

Sort by relevance

Sort by date

- ☒ include patents
- ☒ include citations

Create alert

[HTML] **Intravascular ultrasound-guided interventions in coronary artery disease: A systematic literature review with decision-analytic modelling of outcomes and cost ...**

E Berry, S Kelly, J Hutton, HS Lindsay... - Database of Abstracts ..., 2000 - ncbi.nlm.nih.gov

... 2. Is the technology **cost-effective** in the application ... HS, Blaxill JM, Evans JA, Connelly J, Tisch J, Walker GC, Sivananthan UM, Smith M A. **Intravascular ultrasound-guided interventions** ... This is a critical abstract of a **systematic review** that meets the criteria for inclusion on DARE ...

☆ 99 Cited by 47 Related articles All 6 versions

[HTML] **Coronary artery stents: a rapid systematic review and economic evaluation**

R Hill, A Bagust, A Bakhal, R Dickson... - NIHR Health ..., 2004 - ncbi.nlm.nih.gov

... DES might be considered **cost-effective** if one or more of the following options apply ... 2007] Review Drug-eluting stents: a **systematic review** and economic evaluation ... **Intravascular ultrasound** to guide percutaneous coronary interventions: an evidence-based analysis.[Ont Health ...

☆ 99 Cited by 148 Related articles All 8 versions

Intravascular Ultrasound Imaging-Guided Versus Coronary Angiography-Guided Percutaneous Coronary Intervention: A Systematic Review and Meta-Analysis

F Darmoch, MC Alraies, Y Al-Khadra... - Journal of the ..., 2020 - Am Heart Assoc

... Mendeley: Reddit: Digg: Email: Jump to: Supplementary Materials. Open Accessarticle PDF/EPUB. **Intravascular Ultrasound Imaging-Guided Versus Coronary Angiography-Guided Percutaneous Coronary Intervention: A Systematic Review and Meta-Analysis** ...

☆ 99 Cited by 3 Related articles All 3 versions

12

اگر قبلا مرور نظام مند مشابه انجام گرفته؟؟؟

- بررسی سال انجام مطالعه و پوشش زمانی جستجوی مطالعات در مقاله
- بررسی PICO مطالعه و مقایسه آن با کار شما
- بررسی معیارهای ورود و خروج
- ...

13

تمرین

14

سوال

عوامل تسهیل کننده و موانع رفتار جستجوی اطلاعات سلامت در بین کتابداران

چیست؟

- What are the facilitators and barriers to health information seeking behavior (HISB) among librarians?

15



Review

Online Health Information Seeking Behavior: A Systematic Review

Xiaoyun Jia ^{1,2}, Yan Pang ^{3,*} and Liangni Sally Liu ⁴

¹ Business School, Foshan University, Foshan 528225, China; DrSophiaJia@outlook.com

² Massey University, Auckland 0632, New Zealand

³ Hunan Key Laboratory of Intelligent Logistics Technology, Central South University of Forestry and Technology, Changsha 410004, China

⁴ School of Humanities, Media and Creative Communication, Massey University, Auckland 0632, New Zealand; L.Liu20@massey.ac.nz

* Correspondence: pangyanzima@163.com

Abstract: The last five years have seen a leap in the development of information technology and social media. Seeking health information online has become popular. It has been widely accepted that online health information seeking behavior has a positive impact on health information consumers. Due to its importance, online health information seeking behavior has been investigated from different aspects. However, there is lacking a systematic review that can integrate the findings of the most recent research work in online health information seeking, and provide guidance to governments, health organizations, and social media platforms on how to support and promote this seeking behavior, and improve the services of online health information access and provision. We therefore conduct this systematic review. The Google Scholar database was searched for existing research on online health information seeking behavior between 2016 and 2021 to obtain the most recent findings. Within the 97 papers searched, 20 met our inclusion criteria. Through a systematic review, this paper identifies general behavioral patterns, and influencing factors such as age, gender, income, employment status, literacy (or education) level, country of origin and places of residence, and caregiving role. Facilitators (i.e., the existence of online communities, the privacy feature, real-time interaction, and archived health information format), and barriers (i.e., low health literacy, limited accessibility and information retrieval skills, low reliable, deficient and elusive health information, platform censorship, and lack of misinformation checks) to online health information seeking behavior are also discovered.

Keywords: online health information seeking behavior; online HISB; health information consumers; social



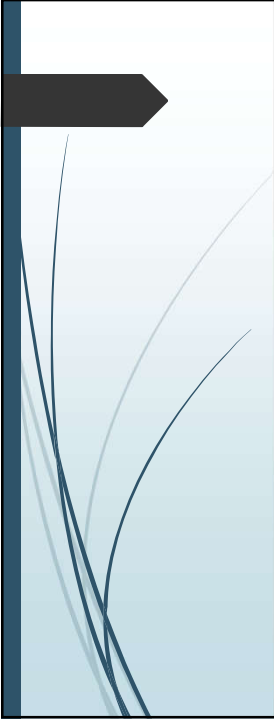
Citation: Jia, X.; Pang, Y.; Liu, L.S. Online Health Information Seeking Behavior: A Systematic Review. *Healthcare* 2021, 9, 1740. <https://doi.org/10.3390/healthcare9121740>

Academic Editor: Tinghao Zhu

Received: 31 October 2021
Accepted: 26 November 2021

HEALTHCARE 9, 1740 (2021)

16



Review article

Barriers to and facilitators of online health information-seeking behaviours among cancer patients: A systematic review

Giulia Ferraris¹, Dario Monzani², Veronica Coppini¹, Lorenzo Conti¹, Silvia Francesca Maria Pizzoli^{1,3}, Roberto Grasso^{1,3} and Gabriella Pravettoni^{1,3}

Abstract
Objective: Disparities in cancer care contribute to higher rates of cancer mortality. Online health information would be a resource for cancer patients to obtain knowledge and make health decisions. However, factors that hinder or facilitate online searching behaviours among patients remain unexplored. The current systematic review aims to identify and synthesise evidence of cancer patients' barriers to and facilitators of online health information-seeking behaviours. **Methods:** Electronic databases (PubMed, EMBASE, Scopus) were systematically searched, and a total of 123 full-text studies were reviewed of which 24 met the inclusion criteria. **Results:** Thematic analysis was performed to identify barriers and facilitators of online health information-seeking behaviours. Seven key themes were identified: (1) socio-demographic characteristics (age, gender, education, income, ethnicity and language), (2) psychosocial aspects (psychological wellbeing, need for a face to face contact, motivation, support), (3) accessibility (Internet access, residence), (4) quality and quantity of information (amount, reliability), (5) cancer stage and symptoms (time since diagnosis, experiencing symptoms), (6) aspects related to healthcare professionals (relationship with the patients and opinions on online health information) and (7) digital literacy (computer skills and literacy). **Conclusions:** Findings underscore the significance of recognising the multifaceted nature of barriers and facilitators affecting cancer patients' online health information-seeking behaviours. A strong link between these factors and cancer patients' ability to make informed decisions and cope effectively with their diagnosis emerged. Consequently, addressing these barriers and leveraging the identified facilitators could lead to improvements in patient-centred care, ultimately contributing to better healthcare services and informed decision-making for cancer patients. Future research should prioritise exploring strategies for enhancing cancer care accessibility across all stakeholders involved.

Registration: CRD42023408091

Keywords
 Online health information-seeking behaviours, cancer, barrier, facilitator, digital divide, Internet

Submission date: 27 June 2023; Acceptance date: 12 October 2023

DIGITAL HEALTH
 Volume 9: 1–22
 © The Author(s) 2023
 Article reuse guidelines:
 sagespub.com/journalsPermissions
 DOI: 10.1177/2055092223120863
 journals.sagepub.com/home/dh
S Sage

17



شروع جستجو

18

نکات مهم

- مستند سازی تمامی مراحل جستجو
 - ✓ استراتژی جستجو در هر پایگاه و زمان جستجو
 - ✓ استفاده از امکان save پایگاهها برای ذخیره جستجو و بروز رسانی های آتی
- جستجوی مطالعات یک پروسه تکرارشونده

19

مراحل ۳ گانه جستجو

- جستجوی اولیه در یک یا دو پایگاه مهم مانند Pubmed و Embase
 - ✓ Google Scholar
 - ✓ library discovery tools
- جستجوی اصلی
 - ✓ جستجوی کامل کلیدواژه ها، مترادفات و کلمات کنترل شده (مانند MeSH و ...)
 - ✓ جستجوی مطالعات خاکستری (Grey Literature)
- جستجوی رفرنسها و استنادات مطالعات انتخابی

20

نمونه جستجو

- مشخص کردن PICO
- جستجوی کلمات مترادف و مرتبط با هر آیتم PICO (ضروری)
- جستجوی کلمات کنترل شده (مثال MeSH، Emtree و ...) (ضروری)
- استفاده از عملگرهای مناسب برای هر جستجو (مثال AND، OR، NEAR، ADJ و ...)
- بکارگیری " " و * و سایر موارد متناسب با هر جستجو

21

سوال

➤ عوامل تسهیل کننده و موانع رفتار جستجوی اطلاعات سلامت در بین کتابداران چیست؟

- What are the facilitators and barriers to health information seeking behavior (HISB) among librarians?

22

PICO

- P: librarians
- I: health information seeking behavior (HISB)
- C: ---
- O: facilitators and barriers

23

انتخاب کلیدواژه های مرتبط

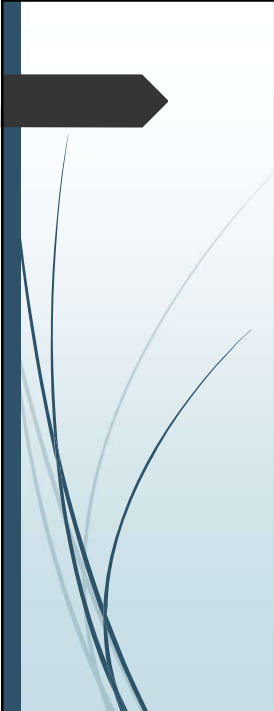
- مقالات بسیار مرتبط
- عنوان/چکیده/کلیدواژه های انتخابی نویسندگان
- استراتژی جستجوی مقالات مروری مرتبط و یا مشابه
- استفاده از MeSH Terms و
- ...

24

PICO

- **P:** librarians; information specialists; clinical librarians; ...
- **I:** health information seeking behavior; HISB; information seeking; ...
- **C:** ---
- **O:** facilitators; barriers; problems; challenges; ...

25



DIGITAL HEALTH

DIGITAL HEALTH
Volume 9, 1-22
© The Author(s) 2023
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/20552076231210663
journals.sagepub.com/home/dh

Sage

Review article

Barriers to and facilitators of online health information-seeking behaviours among cancer patients: A systematic review

Giulia Ferraris¹ , Dario Monzani², Veronica Coppini¹, Lorenzo Conti¹,
Silvia Francesca Maria Pizzoli^{3,4}, Roberto Grasso^{1,3}
and Gabriella Pravettoni^{1,3}

Abstract
Objective: Disparities in cancer care contribute to higher rates of cancer mortality. Online health information would be a resource for cancer patients to obtain knowledge and make health decisions. However, factors that **hinder** or **facilitate online searching behaviours** among patients remain unexplored. The current systematic review aims to identify and synthesise evidence of cancer patients' barriers to and facilitators of online health information-seeking behaviours. **Methods:** Electronic databases (PubMed, EMBASE, Scopus) were systematically searched, and a total of 123 full-text studies were reviewed of which 24 met the inclusion criteria. **Results:** Thematic analysis was performed to identify barriers and facilitators of online health information-seeking behaviours. Seven key themes were identified: (1) socio-demographic characteristics (age, gender, education, income, ethnicity and language), (2) psychosocial aspects (psychological wellbeing, need for a face to face contact, motivation, support), (3) accessibility (Internet access, residence), (4) quality and quantity of information (amount, reliability), (5) cancer stage and symptoms (time since diagnosis, experiencing symptoms), (6) aspects related to healthcare professionals (relationship with the patients and opinions on online health information) and (7) digital literacy (computer skills and literacy). **Conclusions:** Findings underscore the significance of recognising the multifaceted nature of barriers and facilitators affecting cancer patients' online health information-seeking behaviours. A strong link between these factors and cancer patients' ability to make informed decisions and cope effectively with their diagnosis emerged. Consequently, addressing these barriers and leveraging the identified facilitators could lead to improvements in patient-centred care, ultimately contributing to better healthcare services and informed decision-making for cancer patients. Future research should prioritise exploring strategies for enhancing cancer care accessibility across all stakeholders involved.

Registration: CRD42023A08091

Keywords
Online health information-seeking behaviours, cancer, barrier, facilitator, **digital divide**, **Internet**

Submission date: 27 June 2023; Acceptance date: 12 October 2023

26

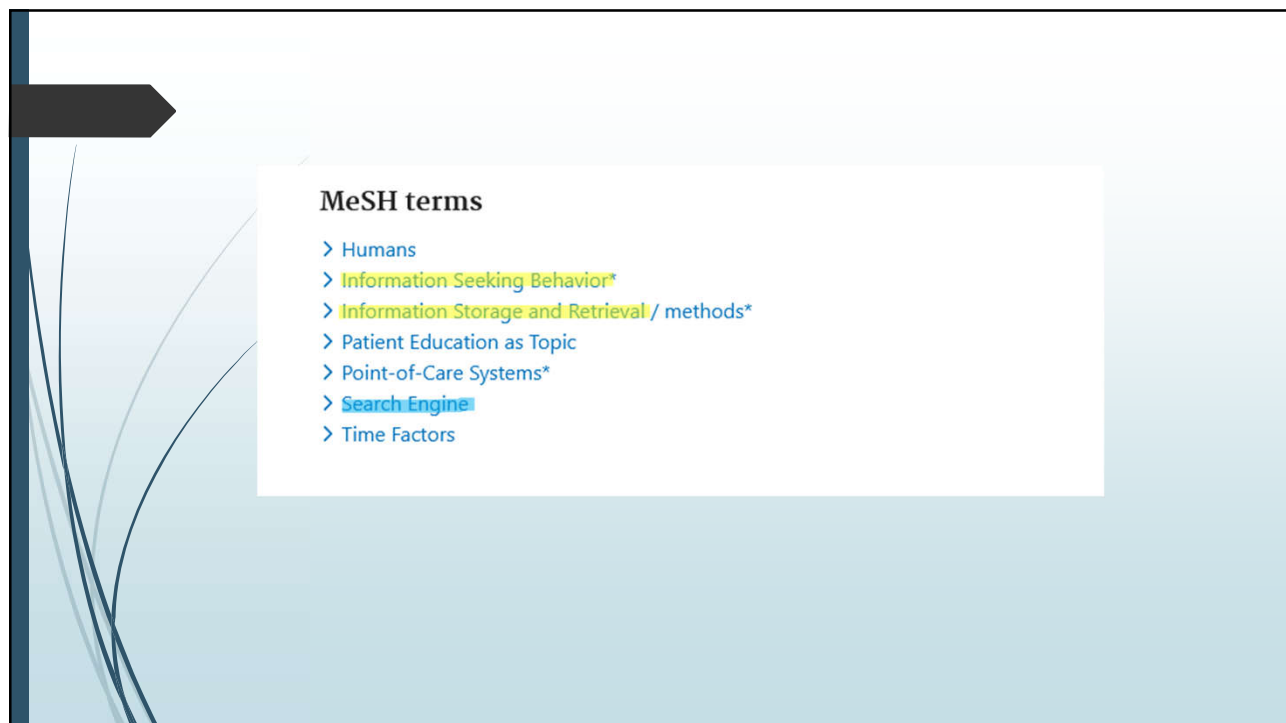


Slide 27 features a light blue background with a dark blue vertical bar on the left. A black arrow points right from the bar. A white box on the right contains the title 'MeSH terms' and a list of seven terms, each preceded by a blue right-pointing chevron. The terms are: Humans, Information Seeking Behavior*, Information Storage and Retrieval / methods*, Patient Education as Topic, Point-of-Care Systems*, Search Engine, and Time Factors.

MeSH terms

- > Humans
- > Information Seeking Behavior*
- > Information Storage and Retrieval / methods*
- > Patient Education as Topic
- > Point-of-Care Systems*
- > Search Engine
- > Time Factors

27



Slide 28 is identical to slide 27, but with highlights on the list items. 'Information Seeking Behavior*' and 'Information Storage and Retrieval / methods*' are highlighted in yellow. 'Search Engine' is highlighted in blue.

MeSH terms

- > Humans
- > Information Seeking Behavior*
- > Information Storage and Retrieval / methods*
- > Patient Education as Topic
- > Point-of-Care Systems*
- > Search Engine
- > Time Factors

28

- **Truncations:** * ; ? ;
 - **Vaccin*:** vaccine; vaccination; vaccines; ...
- **Quotation mark:** " " ; ' '
 - "coronavirus disease 2019"
 - "psychological stress"

31

Proximity search

- **NEAR, ADJ**
 - e.g. neurology **NEAR/3** system ----- (WoS, Embase, Cochrane)
 - e.g. neurology **adj3** disorders ----- (Ovid)
- **field:~N**
 - e.g. "neurology system" **[Title:~2]** ----- (Pubmed)

32

Proximity search

- PRE/n (precedes by)
e.g. neurology **PRE/2** system ----- (SCOPUS)
- W/n (within)
e.g. neurology **W/5** system ----- (SCOPUS)

33

Fields & field tags [Pubmed]

- Title [ti]
- Title/Abstract [tiab]
- Text Words [tw]
- Author [au]
- Affiliation [ad]
- All Fields [all]
- Abstract
- Title, abstract, keywords

34



35

کلمات کنترل شده

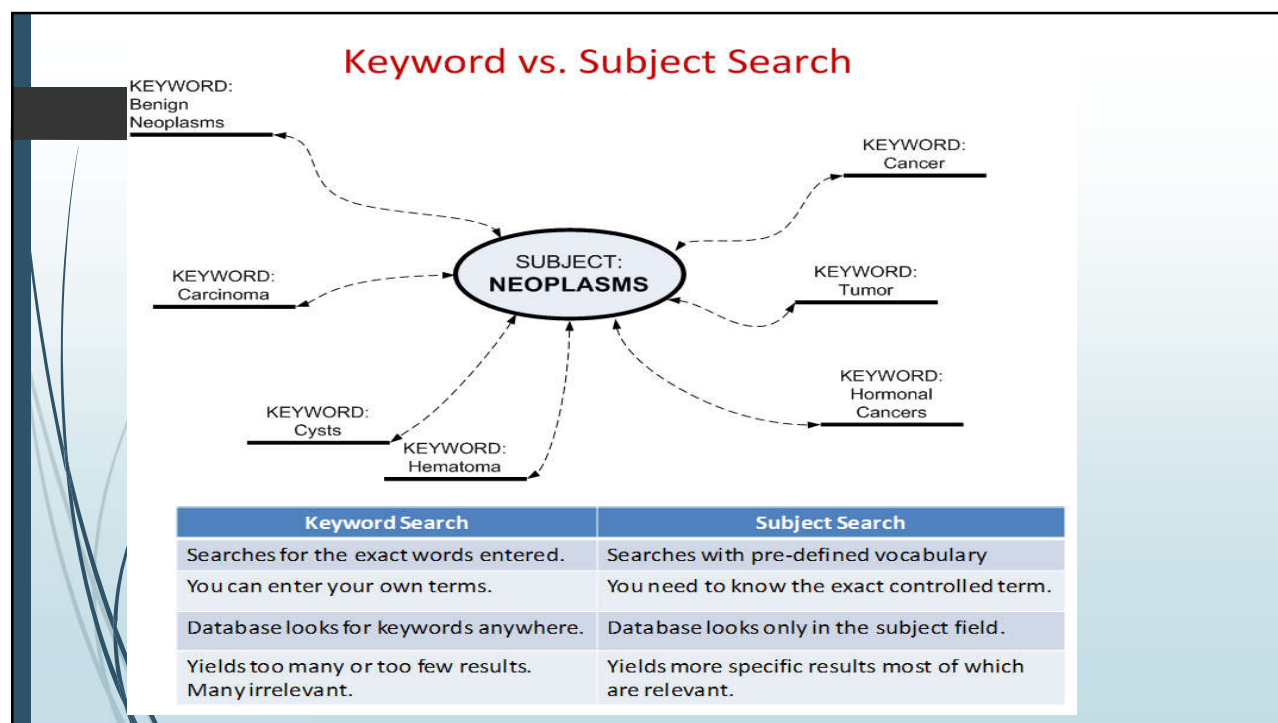
❖ کلمات کنترل شده همان اصطلاحات اصطلاحنامه (Thesaurus) مربوط به یک پایگاه اطلاعاتی است

❖ MeSH مربوط به پایگاه اطلاعاتی Medline

❖ جستجوی مفهومی

A network diagram with white nodes and connecting lines on a dark purple background.

36



37

PubMed.gov

Search PubMed Search

Advanced

PubMed® comprises more than 30 million citations for biomedical literature from MEDLINE, life 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

[E-utilities API](#)
[FTP](#)
[Batch Citation Matcher](#)

Explore

[MeSH Database](#)
[Journals](#)
[Legacy PubMed \(available until at least 10/31/2020\)](#)

38

NIH National Library of Medicine
National Center for Biotechnology Information

MeSH MeSH Search Limits Advanced Help

MeSH

MeSH (Medical Subject Headings) is the NLM controlled vocabulary thesaurus used for indexing articles for PubMed.

Using MeSH

[Help](#)
[Tutorials](#)

More Resources

[E-Utilities](#)
[NLM MeSH Homepage](#)

39

NIH National Library of Medicine
National Center for Biotechnology Information

MeSH MeSH information seeking Search Create alert Limits Advanced Help

Summary ▾

Search results

Items: 2

☐ [Information Seeking Behavior](#)

1. How **information** is gathered in personal, academic or work environments and the resources used.
Year introduced: 2010

☐ [Information Literacy](#)

2. The ability to recognize when **information** is needed and to locate, evaluate, and use the needed **information** effectively.
Year introduced: 2011

Send to: ▾

PubMed Search Builder

Add to search builder AND ▾

Search PubMed

[YouTube](#) [Tutorial](#)

Find related data

Database: Select ▾

Find items

40

Full ▾

Information Seeking Behavior

How information is gathered in personal, academic or work environments and the resources used.
Year introduced: 2010

PubMed search builder options

[Subheadings:](#)

☐ classification ☐ ethics ☐ radiation effects
☐ drug effects ☐ physiology

☐ Restrict to MeSH Major Topic.
☐ Do not include MeSH terms found below this term in the MeSH hierarchy.

Tree Number(s): F01.145.209.372, F01.145.535, L01.143.458
 MeSH Unique ID: D057226

Entry Terms:

- Behavior, Information Seeking
- Behaviors, Information Seeking
- Information Seeking Behaviors
- Seeking Behavior, Information

[All MeSH Categories](#)
[Psychiatry and Psychology Category](#)
[Behavior and Behavior Mechanisms](#)
[Behavior](#)
[Communication](#)
Information Seeking Behavior

[All MeSH Categories](#)
[Psychiatry and Psychology Category](#)
[Behavior and Behavior Mechanisms](#)
[Behavior](#)
Information Seeking Behavior

[All MeSH Categories](#)
[Information Science Category](#)
Information Science

Send to: ▾

PubMed Search Builder

▾

[YouTube Tutorial](#)

Related information

PubMed

PubMed - Major Topic

Clinical Queries

NLM MeSH Browser

Recent Activity

[Turn Off](#) [Clear](#)

	Information Seeking Behavior	MeSH
	information seeking (2)	MeSH
	Demography	MeSH
	demographic (4)	MeSH
	income (7)	MeSH

[See more...](#)

41



جستجوی پیشرفته در Pubmed

42

تمرین

► برای 2 سوال (PICO) کلمات مترادف و کنترل شده تعیین کنید

► برای سوالات فوق استراتژی مناسب جستجو در Pubmed

بنویسید

43

سپاس

پایه اسلام
هر که در جستجوی دانش باشد بهشت در جستجوی او
مکتب منیر ۳۸

44