



# پیام پژوهشی

*Sima Nedjat,  
MD, MPH, PhD of Gerontology, Knowledge Utilization Research Center, Tehran University of Medical sciences.*

*Email;*

*[sima\\_nedjat@yahoo.com](mailto:sima_nedjat@yahoo.com)*

*[sima.nedjat2011@gmail.com](mailto:sima.nedjat2011@gmail.com)*



*Evidence based medicine should be complemented by evidence based implementation*

Richard Grol

○ پژوهش منجر به پیدایش یافته های نوینی می باشد که به صورت بالقوه می توانند مراقبت های سلامت را موثرتر و مقرون به صرفه تر کنند،

○ اما یافته های این پژوهش ها نمی تواند منجر به تحول شود مگر این که ارائه دهندگان خدمات بالینی و بهداشتی آن ها را به کار گیرند.



▶ ترجمان دانش

▶ ترجمان

▶ دانش

## هدف ترجمان دانش تغییر رفتار است

- تغییر رفتار محققین برای آنکه از ابتدای طراحی سؤال پژوهش تا انجام پژوهش و گزارش نتایج آن، به ترجمان آن بیاندهند.
- ▶ تغییر رفتار ارائه دهندگان و گیرندگان خدمت به صورتی که مبتنی بر شواهد علمی رفتار نمایند.
- ▶ تغییر رفتار سیاستگذاران و مدیران برای اینکه آگاه از شواهد تصمیم گیری نمایند.

## دامنه فعالیت های ترجمان دانش

□ فرآیندی است که کلیه فعالیت‌ها از زمان شکل‌گیری "سوال پژوهش" تا "ایجاد تغییر" را در بر می‌گیرد:

- ۱- سوال پژوهش
- ۲- مشارکت دینفعان در تحقیق
- ۳- تولید محصول، طرح انتشار نتایج
- ۴- مدیریت تغییر

▶ سالیانه مبالغ هنگفتی صرف پژوهش می‌گردد  
▶ اما ترجمان دانش به درستی انجام نمی‌شود  
مثال: در آمریکا تنها ۵۵٪ مراقبت پیشنهادی را دریافت میکنند  
یافته‌های مشابه در کشورهای توسعه یافته و در حال توسعه موجود است

▶ As a result of these evidence-practice gaps, patients fail to benefit optimally from advances in healthcare resulting in poorer quality of life and loss of productivity both personally and at the societal level.

- ▶ 1- McGlynn EA, Asch SM, Adams J, Keesey J, Hicks J, DeCristofaro A, Kerr EA. The quality of health care delivered to adults in the United States. *N Engl J Med.* 2003;348:2635-2645. doi: 10.1056/NEJMsa022615.
- ▶ 2- Grol R. Successes and failures in the implementation of evidence-based guidelines for clinical practice. *Med Care.* 2001;39:II46-II54.
- ▶ Grimshaw, J.M., et al., *Knowledge translation of research findings.* Implementation science, 2012. 7(1): p. 50.

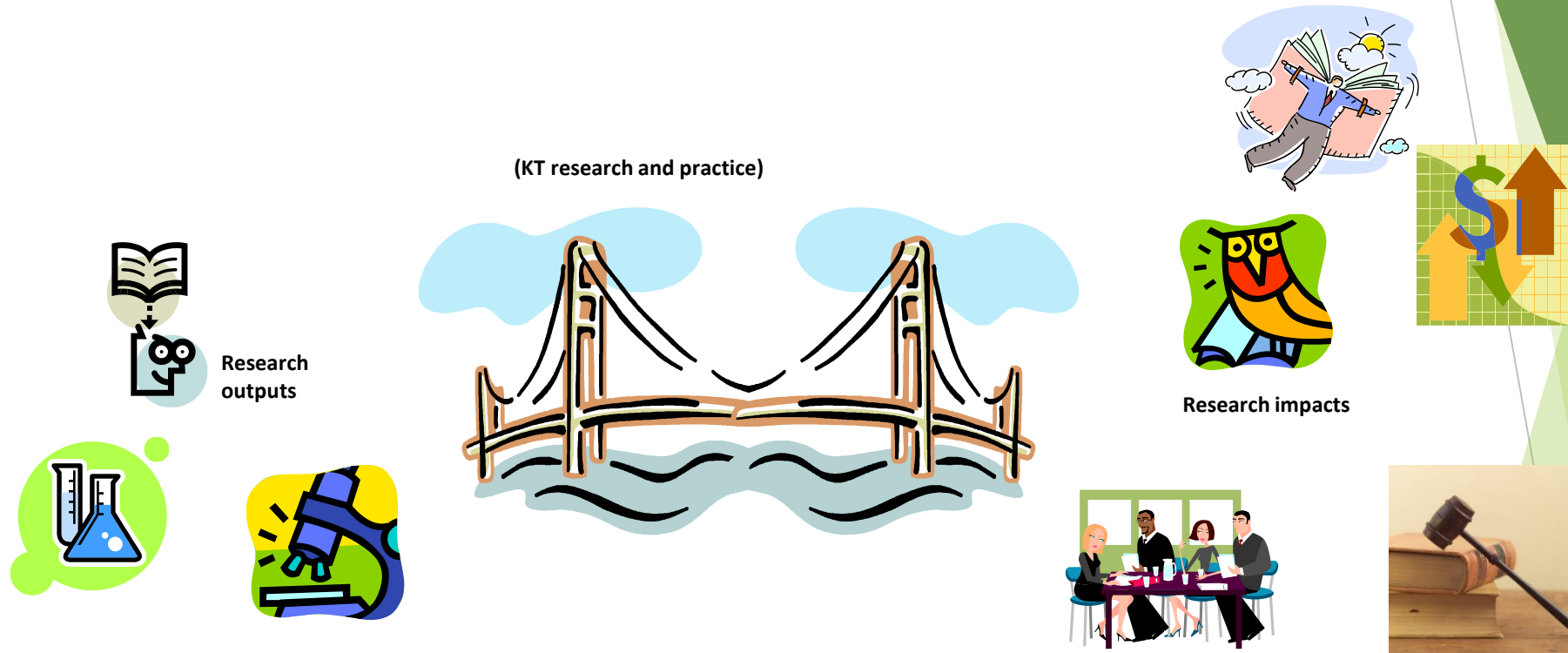
## Importance of KTE

- ▶ Consistent evidence of failure to translate research findings into clinical practice:
  - ▶ 30-40% patients do not get treatments of proven effectiveness.
  - ▶ 20–25% patients get care that is not needed or potentially harmful.

- ▶ Grimshaw, J.M., et al., *Knowledge translation of research findings*. Implementation science, 2012. 7(1): p. 50.
- ▶ Schuster MA, McGlynn EA, Brook RH. How good is the quality of health care in the United States? 1998. Milbank Q. 2005;83:843-895. doi: 10.1111/j.1468-0009.2005.00403.x.



# Knowledge Translation is the bridge between discovery and impact



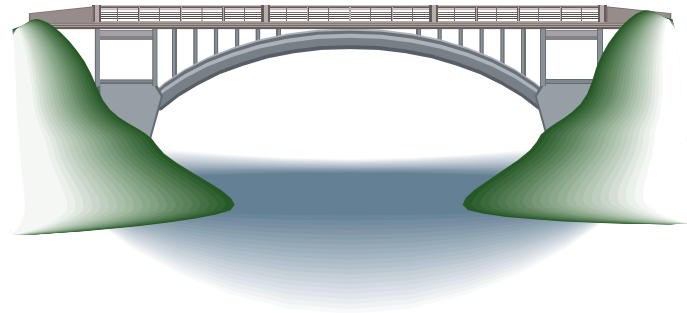
**It's is about making a difference**



# Knowledge Translation

**Science**

**Change behavior**



# Knowledge Translation definition

- ▶ The exchange, synthesis and ethically-sound application of knowledge—within a complex system of interactions among researchers and users—to accelerate the capture of the benefits of research for Canadians through improved health, more effective services and products, and a strengthened health care system(**Canadian Institute of Health Research,2004**).
- ▶ The synthesis, exchange, and application of knowledge by relevant stakeholders to accelerate the benefits of global and local innovation in strengthening health systems and improving people's health ( **WHO,2005**).



“Knowledge is the most important raw material of government; working with knowledge is its most important process; and knowledge is what citizens expect government to provide.”

Thomas A. Stewart  
Editorial Director  
Business 2.0 Magazine

# What is Knowledge Translation?

## Knowledge synthesis

- The contextualization and integration of research findings of individual research studies within the larger body of knowledge on the topic.
- Synthesis is a family of methodologies for determining what is known in a given area or field and what the knowledge gaps are.

## Dissemination

- Involves identifying the appropriate audience for the research findings, and tailoring the message and medium to the audience.

## Knowledge exchange

- Refers to the interaction between the knowledge user and the researcher resulting in mutual learning, it encompasses the concept of collaborative or participatory, action oriented research where researchers and knowledge users work together as partners to conduct research to solve knowledge users' problems (Integrated KT).

## Ethically sound application of knowledge

- The iterative process by which knowledge is actually considered, put into practice or used to improve health and the health system.
- KT activities must be consistent with ethical principles and norms, social values as well as legal and other regulatory frameworks .

# A five-step approach to knowledge transfer

1. **Message (WHAT?)**
2. Target Audience ( To WHOM?)
3. Messenger (BY WHOM?)
4. Knowledge transfer process and support system (HOW?)
5. Evaluation (with what EFFECT should it be transferred?)



## Body of research

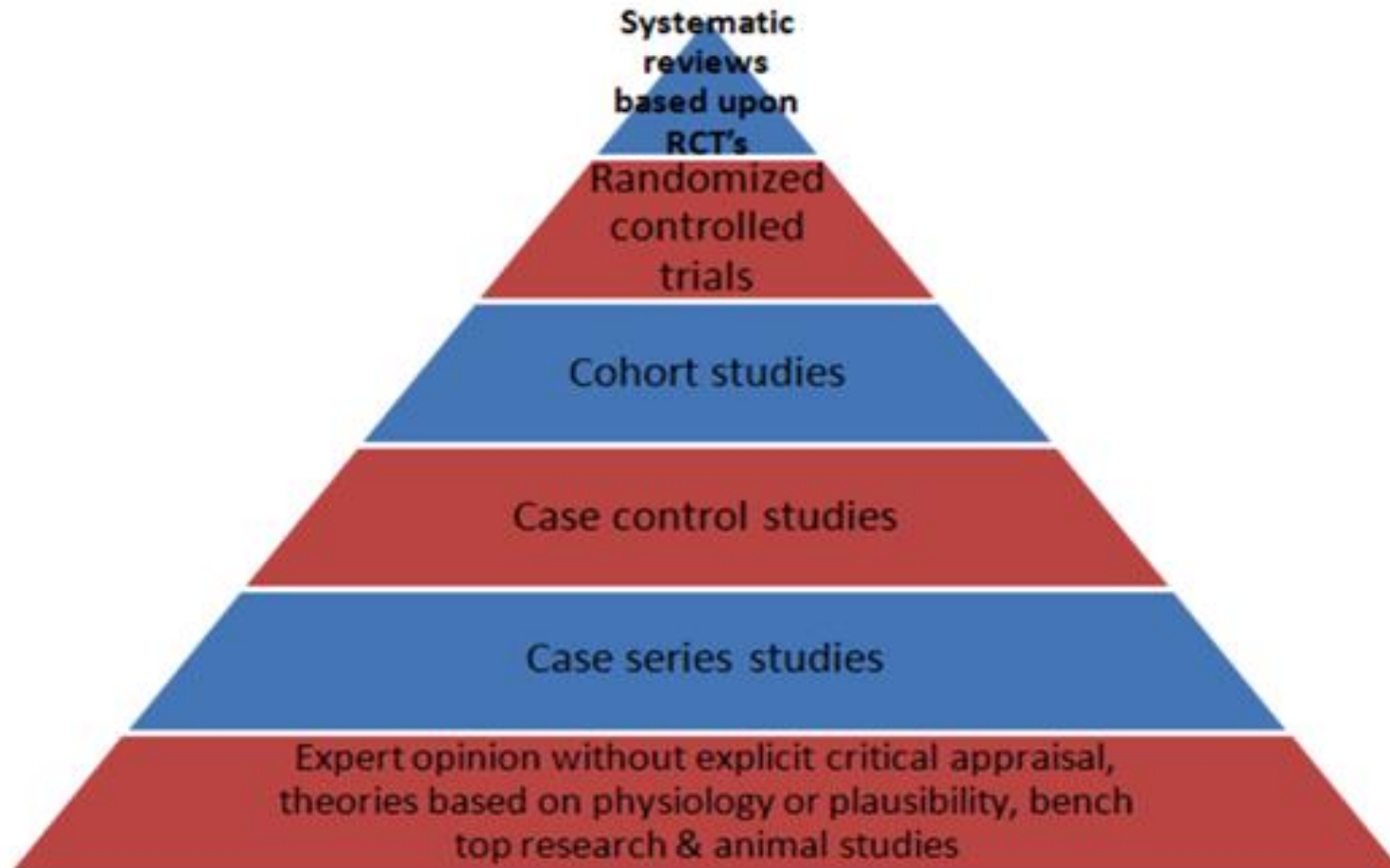
- ▶ The research literature strongly suggests that research organizations should transfer **actionable message** from a **body of research** knowledge, not simply a single research report or the results of a single study.



- ▶ The basic unit of knowledge translation should be *systematic reviews* or other *syntheses* of the global evidence base.
- ▶ Always?



# Level of Evidence



# Is it correct to consider individual studies as the unit of knowledge translation?

- ▶ This is inappropriate when the targets for knowledge translation are patients, health care professionals and policy makers.
- ▶ Individual studies rarely, by themselves, provide sufficient evidence for policy or practice changes.

## Not all research can or should have an impact

- ▶ Some bodies of research knowledge will not generate a “take-home” message, because either the research has no apparent application for decision makers or the findings are not conclusive.



- ▶ Lavis has argued that the 'natural unit' for research translation should be '**actionable messages**' arising from systematic reviews, and that the effort of promoting research findings to a given category of user should be concentrated on the fraction of **systematic reviews** that have an actionable message for that particular audience.



- ▶ An actionable message can be defined by considering these questions:
  - ▶ Why is this issue important?
  - ▶ What does the research evidence tell us about this issue?
  - ▶ Do we know whether and to what extent current decision-making differs from optimal/informed decision making?
  - ▶ Who should act and what should be done?

# Message (WHAT?)

- ▶ “Actionable messages” are preferable to single research reports or the results of single studies.



# RESULTS FOR CANADA'S APPLIED RESEARCH CENTRES

Surveyed 175 applied health or economic/social research centers on knowledge transfer (KT)

- | ▶ What is transferred?   | % frequently/always |
|--------------------------|---------------------|
| ▶ Summaries or synthesis | 34                  |
| ▶ Actionable messages    | 30                  |
- ▶ i.e. over two-thirds are still doing knowledge transfer with raw results from single studies



## “What should be transferred?”

- ▶ The question “What should be transferred?” challenges knowledge translators to identify the **key messages for different target audiences and to fashion these in language and knowledge translation products that are easily assimilated by different audiences.**

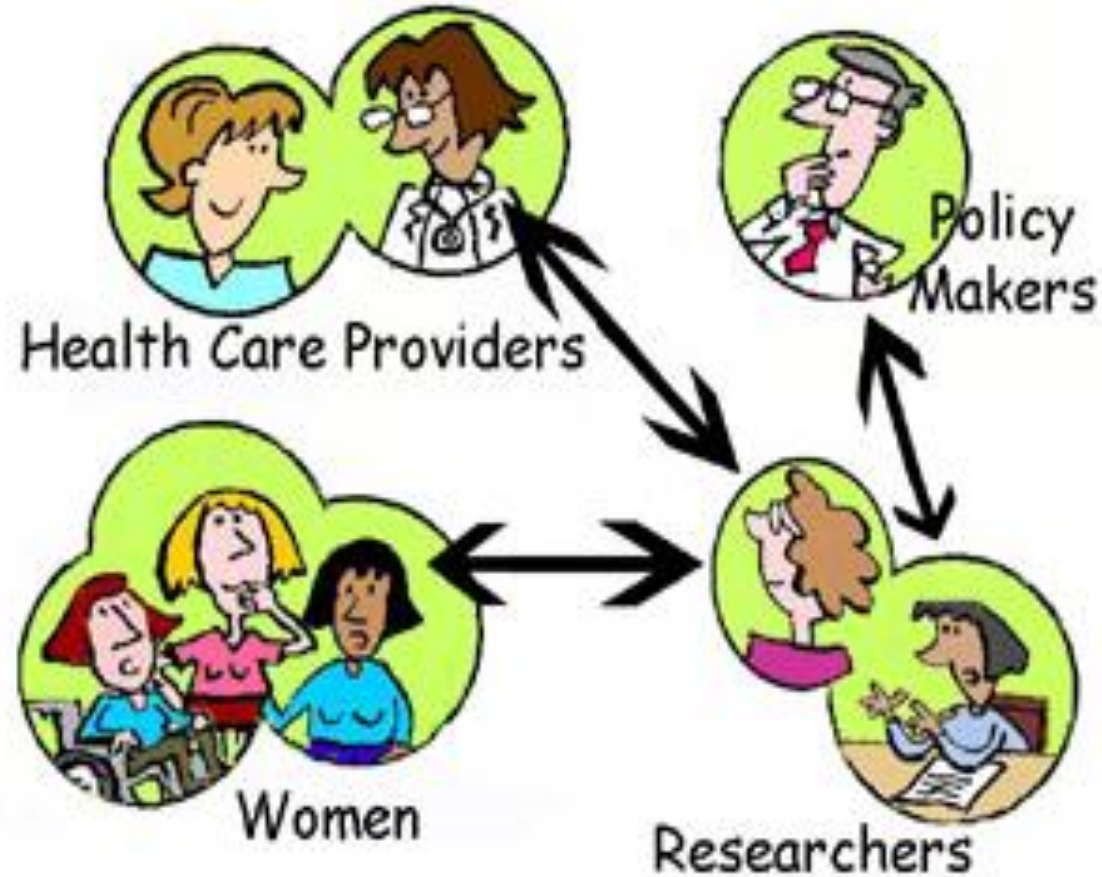




# For Example

- ▶ Patient Decision Aids for patients
- ▶ Clinical practice guidelines for health care professionals
- ▶ Actionable messages for policy makers

# Tailoring your Findings for Research Users



# A five-step approach to knowledge transfer

1. Message (WHAT?)
2. **Target Audience ( To WHOM?)**
3. Messenger (BY WHOM?)
4. Knowledge transfer process and support system (HOW?)
5. Evaluation (with what EFFECT should it be transferred?)

Lavis, J; et al. (2003). « How Can Research Organizations More Effectively Transfer Research Knowledge to Decision-Makers »; *The Milbank Quarterly*, 81 (2) : 221-248.

# Target Audiences

- ▶ A message's target audience must be clearly identified.
- ▶ Multiple audience-specific messages are needed.
- ▶ Research knowledge alone may not impact decisions.

# Target Audiences

- ▶ The term “target audience or group” can be used to describe the different groups of stakeholders connected to your project.
- ▶ It is important to identify and be clear about who your stakeholders are and then you need to be able to map them to one of the categories of the **awareness, understanding, and action model.**



## Target Audiences

- ▶ Identify the **most appropriate** target audience(s) for each message and fine-tune the message and approach to knowledge transfer for each target audience

# گروه مخاطب فعالیت های ترجمان دانش

## استفاده کنندگان از دانش

- ماکرو ( Macro level ): وزارت بهداشت
- مزو ( Meso level ): مدیران
- میکرو ( Micro level ): پزشکان و پرستاران، بیماران و مردم

## تولید کنندگان دانش

سازمان های تولید کننده دانش  
و محققین

## واسطه گرهای دانش

فرد، گروه، سازمان

# What do brokers do?

- ▶ Find and link people
- ▶ Work with both parties to scan the literature, summarize what exists, identify gaps
- ▶ Work with researchers and users of research to create research-able questions from policy/management issues
- ▶ Ensure that both researchers and users of research are engaged throughout the research process



# Where is brokering done?

## ▶ Brokering can be done in a variety of settings

- ▶ Knowledge brokering organizations
- ▶ Individuals or teams in research organizations
- ▶ Individuals or teams in decision-making organizations



# Thank You!