

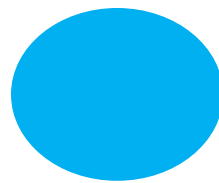
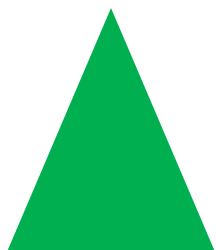
The Role of the Occupational Health Nurse in EBP & Research

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What shape are you?



Questions we are going to try to answer

- How useful is the occupational health evidence base in practice?
- What should be the evidence base for occupational health interventions?
- What, in the context of occupational health, should even constitute “evidence”?
- What sort of evidence base should occupational health nurses be desiring to do their jobs more effectively?

INTENT

- The concept of evidence-based practice (EBP) (Sackett et al. 1996) was introduced to health care as a means of **linking** research findings and clinical practice (Andermann et al. 2016; Powell et al. 2015)

**Clinical
Practice**

**Research
Findings**

Evidence-Based Practice

A 3D diagram illustrating the concept of Evidence-Based Practice. It features a light blue background with a series of white, rectangular blocks arranged in a stepped pattern. A prominent green rectangular block, representing the bridge, spans across the gap between two white blocks. The text 'Research Findings' is positioned on the left white block, and 'Clinical Practice' is on the right white block. The green block is labeled 'Evidence-Based Practice', indicating that it is the synthesis of research findings and clinical practice.

Why do you do what you do
each day?????

*What information do you base
your nursing care on?*

*"The goal of EBP is to change practice – to
locate the best evidence and put it into
practice." [RN.com EBP CE](#)*

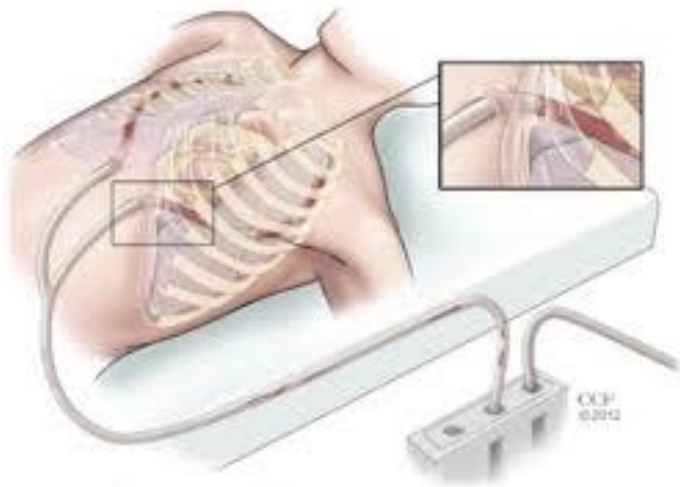
“Most nurses practice according to what they learned in nursing school, their experience, and what colleagues share in the clinical setting.”

Estabrooks, 1998; 2003 &
Pravikoff 2005

Common Drivers

How Patient Care is Practiced...

- **Ritual**...accepted practices versus research proven practices...The *"that's the way we've always done it"* syndrome.
- **Tradition**...the way I learned how to do it.
- **Personal opinion**... without assessment of underlying assumptions.
- **Arrogance**...I have to be right syndrome.
- **Lack of concern**... for patients values'.



Reprinted from EJCTS.(2)



Chest tube stripping

The Need for EBP

- *“EBP is essential to transform healthcare by providing proven effective treatments. At present there is a gap between theory and practice that results in diminished patient care, inefficient practice, and an excessive time lag between the discovery of knowledge and its incorporation into clinical practice.” (Salmond 2007) p.460*
- *‘Knowledge translation’ ~ 17 years*



Daniel's Faithfulness

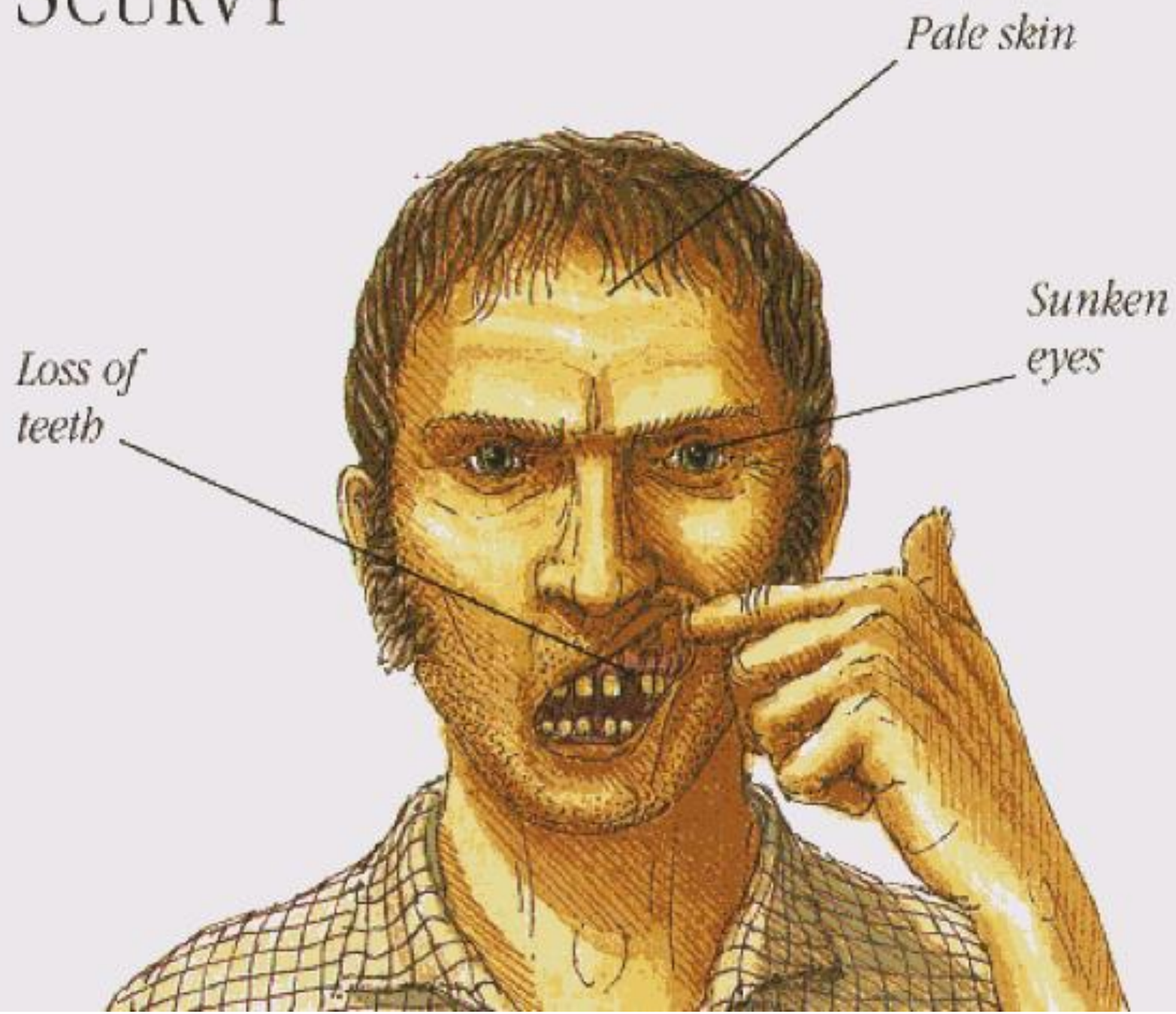
8But Daniel resolved in his heart that he would not defile himself with the king's food or wine. So he asked the chief official for permission not to defile himself.

9Now God had granted Daniel favor and compassion from the chief official, 10but he said to Daniel, "I fear my lord the king, who has assigned your food and drink. For why should he see your faces looking thinner than those of the other young men your age? You would endanger my head before the king."

11Then Daniel said to the steward whom the chief official had set over Daniel, Hananiah, Mishael, and Azariah, 12**"Please test your servants for ten days. Let us be given only vegetables to eat and water to drink. 13Then compare our appearances with those of the young men who are eating the royal food, and deal with your servants according to what you see."**

14So he consented to this and tested them for ten days. 15**And at the end of ten days, their appearance was better and healthier than all the young men who were eating the king's food. 16Thus the steward continued to withhold their choice food and the wine they were to drink, and he gave them vegetables instead.**

SCURVY



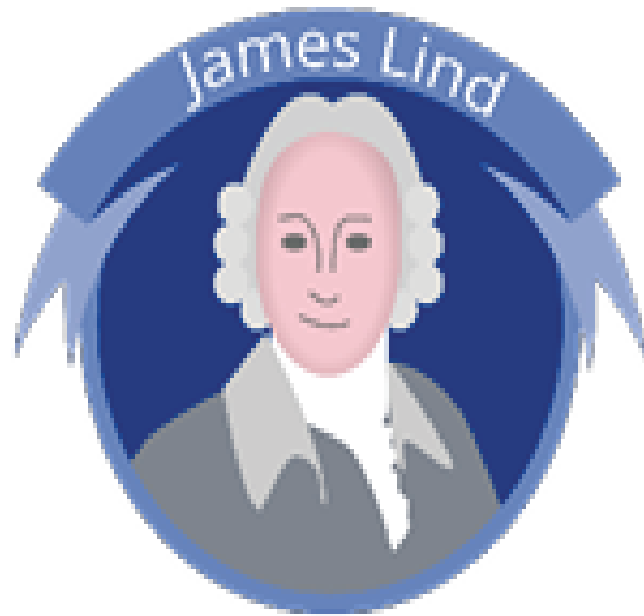
James Lind



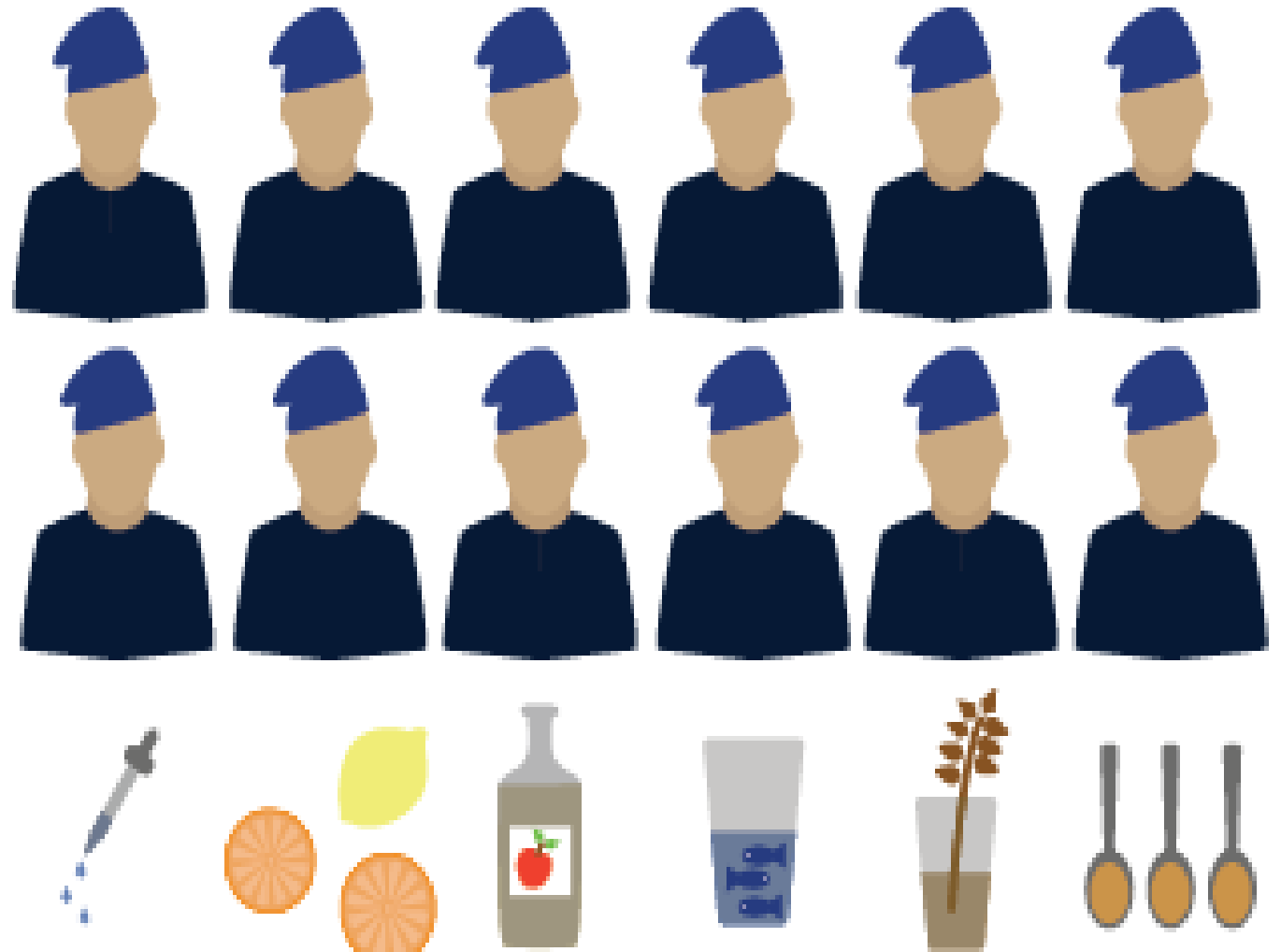
- **Born Edinburgh 1716**
- **On HMS Salisbury in 1747 he allocated 12 men with scurvy**
 - **Cider**
 - **Seawater**
 - **Horseradish, mustard, garlic**
 - **Nutmeg**
 - **Elixir Vitriol**
 - **Oranges and Limes**

1747

Where it all began...



May 20, 1747 - Scottish physician James Lind conducted the first clinical study of the treatment of scurvy on 12 sailors.



Lind discovered that of six therapies, oranges and lemons had the greatest positive effect on the sailors' health.

Historical aspects of evidence-based practice

- Harvie (2002) describes how Lind, a young naval surgeon's assistant, conducted the first modern controlled clinical trial in 1747 in a quest to discover the cause of scurvy, a condition caused by a nutritional deficiency of vitamin C, that killed many sailors and passengers on long voyages in the seventeen hundreds
- In 1747 Lind conducted the trial on 12 men with scurvy where one group (n=2) received 2 oranges and 1 lemon a day. These two men made a good recovery, whereas the others who were given non-citrus treatments, including sea water, consequently did not recover. Despite the evidence, it was to be another 48 years before the British admiralty began to issue lemon juice to naval seamen for the prevention of scurvy.



Figure 1. Dr James Lind, a British naval surgeon who discovered a cure for scurvy.

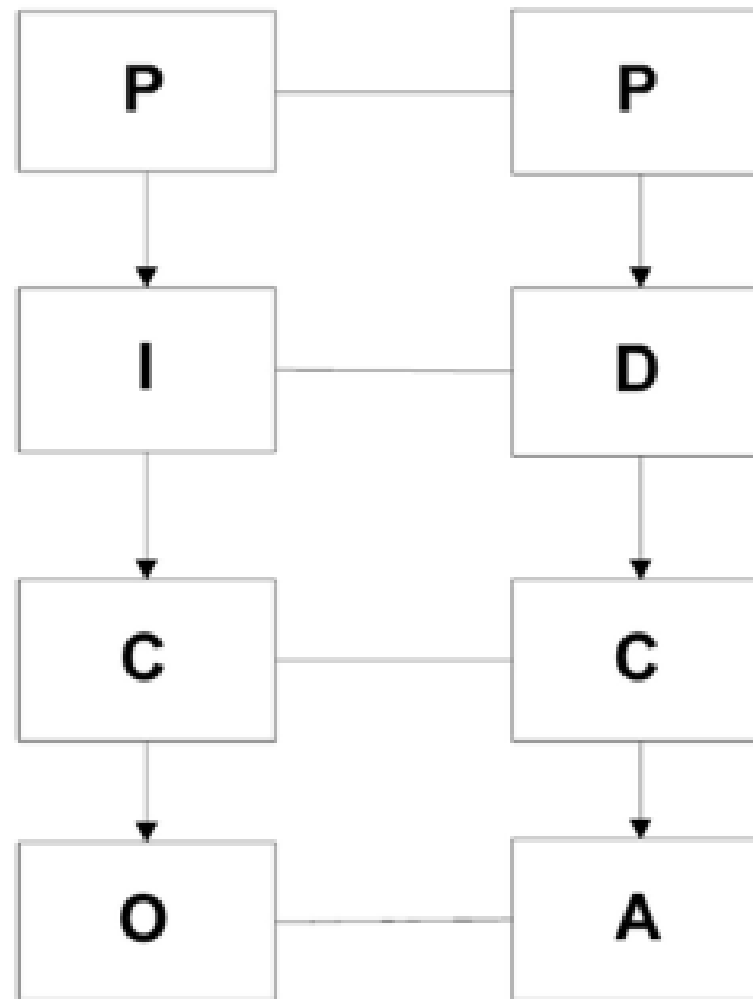


FIGURE 18.2 The population-intervention-comparison-outcome format for **evidence-based** queries complements the plan-do-check-act cycle of quality management and can enhance improvement initiatives.

What is UNIQUE about Occupational Health Nursing?

- Occupational health service delivery is more multidisciplinary than
- other specialties.
- In addition, the primary focus of this specialty is risk prevention and health promotion, rather than diagnosis and treatment.

Professional Focus of OHN

- Although there are similarities between OHS and other health care disciplines, the clinical questions and professional focus of the OHS mainly concern
 - work environment risks and the
 - protection and promotion of workers' health rather than the treatment of disease.
- The aim of the OHS is to prevent work-related illness and protect and promote workers' health and work ability (Heselmans et al. 2010; Kwak et al. 2014).

The Role of RESEARCH

- Research contributes to the
 - development of the **care** provided,
 - development of **interventions and treatments** and
 - understanding the **experience** of those receiving and providing healthcare (Griffiths, 2010).

REALITY

- But the reality is that most OH nurses do not have the time or, just as importantly, the funding to carry out much in the way of research

http://www.

A 3D rendered image featuring a blue background with a white rectangular panel. On the panel, the text 'http://www.' is displayed in a bold, black, sans-serif font. A magnifying glass with a silver rim and a black handle is positioned over the text, specifically focusing on the 'http' portion. The magnifying glass is tilted at an angle, and its lens is clear, showing the text underneath. The overall composition suggests a focus on web technology or online search.







Start \$mall

**start small
but start**



**BIG
JOURNEYS
BEGIN
WITH
SMALL
STEPS**

Think big.
Start small.
Move fast.

A young boy with brown hair, wearing black and silver goggles, is looking down at a small wooden airplane on a white surface. His hands are clasped together in front of him. The background is a plain, light gray.

**“DREAM BIG.
START SMALL.
ACT NOW.”**

Robin Sharma

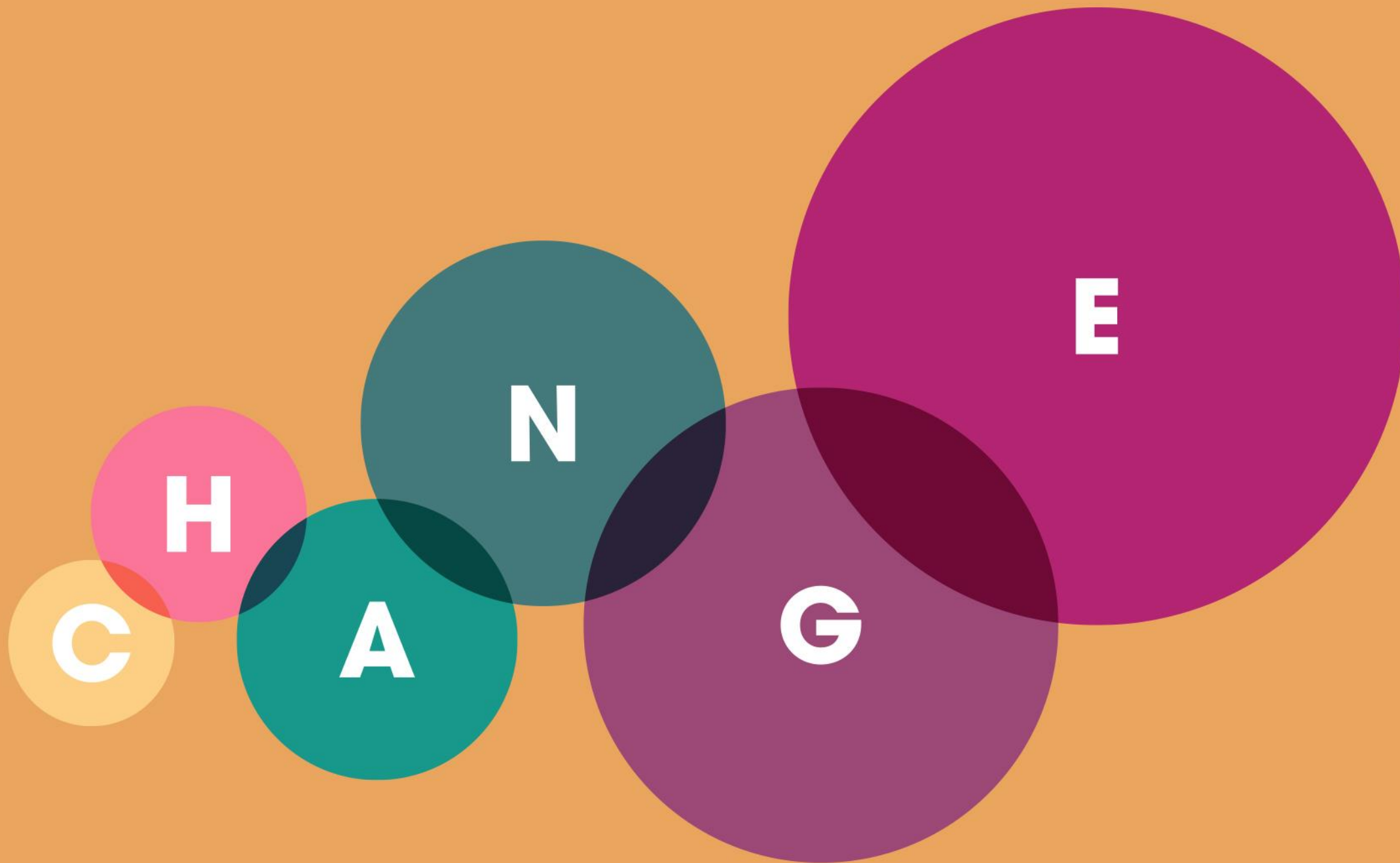
**Success is the
sum of small
efforts – repeated
day in and day out.**



Robert Collier
www.geckoandfly.com

Some Ideas for EBP and Research

- Does pre-employment health screening work?
- What can occupational health nurses do to help people with common health problems to start work or return to work?
- What is the best way to change behavior?





Dream **big**.
Start **small**.
But most of all, **start**.

- *Simon Sinek*



Ask A Question



ASK MORE QUESTIONS



GET MORE ANSWERS

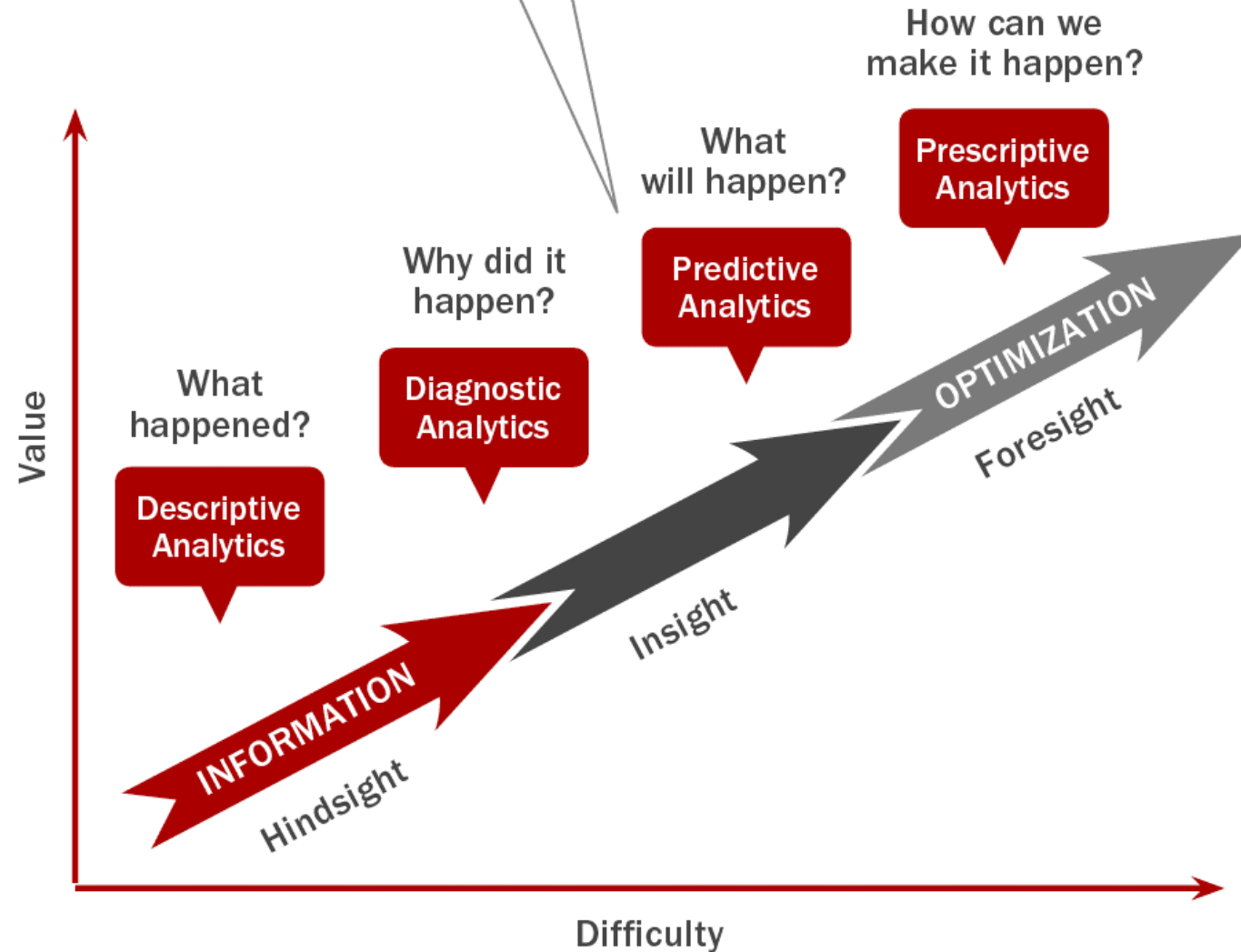
Anthony Burrill

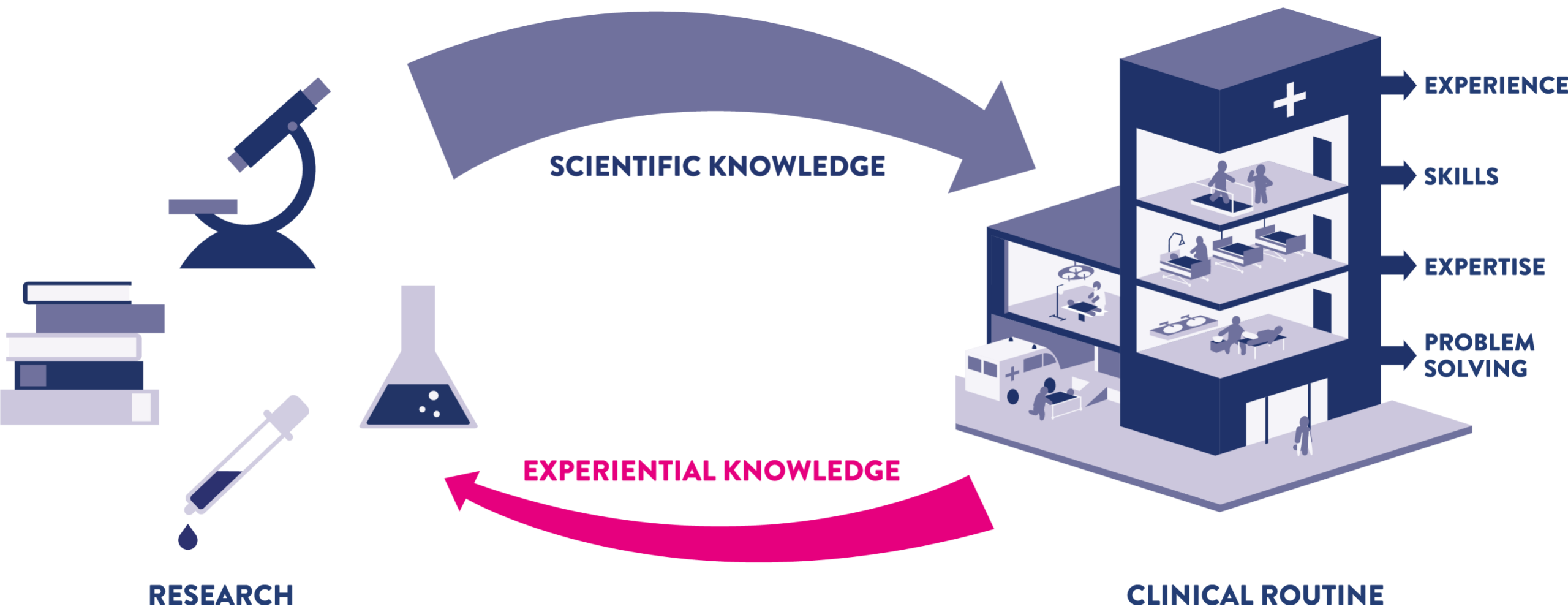
Make a girl laugh with questions like

So, do you think
fish get thirsty?



The four types of analytics







KNOWiNg

DoiNg

**THE
GREATEST GAP
IN THE WORLD IS THE GAP BETWEEN
KNOWING AND
DOING**

-John Maxwell

Knowing How Is Not The Problem...

- Like losing weight, our problem is not with knowing **HOW**. When we really want to, we figure out how and learn by doing.
- Our problem is with being **COMMITTED** enough to **DO** what it takes every day, and do it **PERMANENTLY**, not just in short bursts of inspired energy.

What are examples of knowing and not doing?

- Tolerating misaligned employees
- Keeping inefficient systems
- Failing to delight your “customers”

What are the most costly issues for employers?

- The most costly health issues for employers are smoking, hypertension, and sedentary behavior, all of which are associated with the leading causes of death (Redmond & Kalina, 2009).
- Well-designed workplace health promotion programs that address these behaviors and maintain healthy workers' safety can save the company up to three times the cost of the program (O'Donnell, 2010).
- In addition, the indirect cost of presenteeism, or less-than-optimal job performance due to chronic health problems, can be reduced (Redmond & Kalina, 2009).
- The Task Force on Community Preventive Services recommends workplace programs to improve diet and physical activity based on strong evidence of their effectiveness in controlling weight (Guide to Community Preventive Services, 2013).

SMOKING

HYPERTENSION

SEDENTARY
BEHAVIOR

Workplace Health Promotion Programs

- Strong evidence demonstrates that workplace health promotion programs achieve both **financial** and **health benefits** (Baicker, Cutler, & Song, 2010).

- Strong evidence demonstrates that workplace health
- promotion programs achieve both financial and health
- benefits (Baicker, Cutler, & Song, 2010). Several evi
- -
- dence-based theories and methods can be effectively used
- by occupational health nurses in designing health promo
- -
- tion programs for both individuals and groups. These the
- -
- ory-based strategies include the Transtheoretical Model,
- self-efficacy, and motivational interviewing. The effec-
- tiveness of programs is enhanced by using a structured

Not SURE of the strategies

- Although occupational health nurses are aware that unhealthy lifestyle behaviors are modifiable, they may be **unsure** of the strategies needed to design effective worksite health promotion programs.

The “new” meaning of WELLNESS

- Wellness can be defined as “an active process through which people become aware of, and make choices toward, a more successful existence” (National Wellness Institute, n.d.).

The NEW concept of WELLNESS

- However, the concept of wellness is broader, and includes attaining an individual's “**personal best**,” even in disease states or with physical or mental disability.
- This conceptualization of wellness includes six interrelated dimensions:
 - physical,
 - social,
 - intellectual,
 - spiritual,
 - emotional, and
 - occupational (National Wellness Institute, n.d.).
- Achieving balance among the six dimensions is an essential step in moving toward the goal of wellness.

The FOCUS is HEALTH PROMOTION

- Health promotion was clearly **defined by** O'Donnell (2002) as “the science and art of **helping people change their lifestyle** to move toward a state of optimal health.”
- This straightforward definition should resonate with nurses, who understand nursing as **a helping profession** that is both a science and an art.
- Many theories and strategies guide nurses in assisting clients as they change lifestyle behaviors.
- What is “**best practice**” or “**evidence-based** practice” that ALL OHNs must employ?

MULTIPLIER THINKING

- Urgency:
How **SOON**
does it matter?
- Importance:
How **MUCH**
does it matter?
- Significance:
How **LONG**
does it matter?



The Focus Funnel™



Vaden, R. (2015). How to multiply your time. Retrieved from <https://www.youtube.com/watch?v=y2X7c9TUQJ8>

The Focus Funnel™



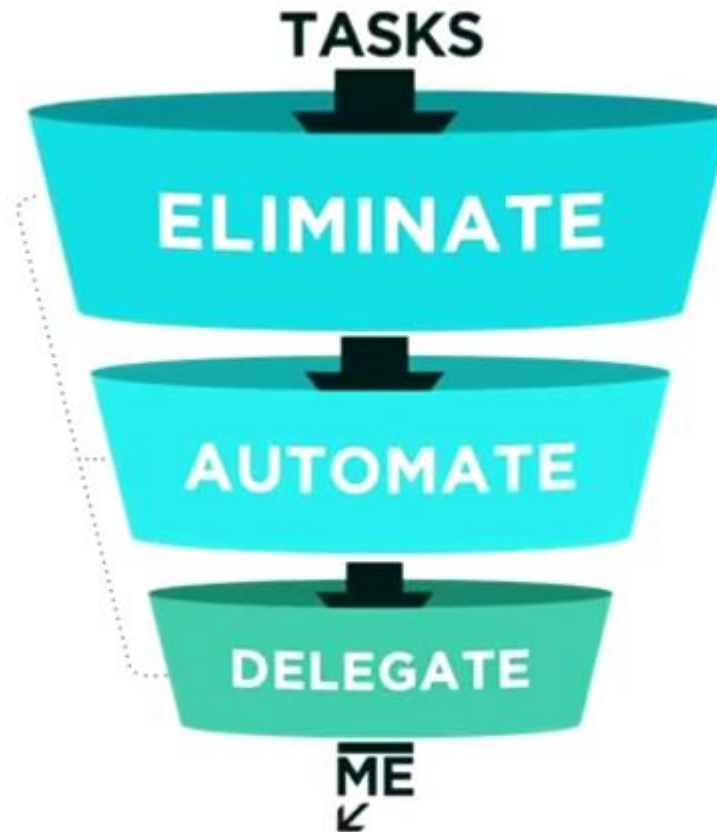
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The Focus Funnel™



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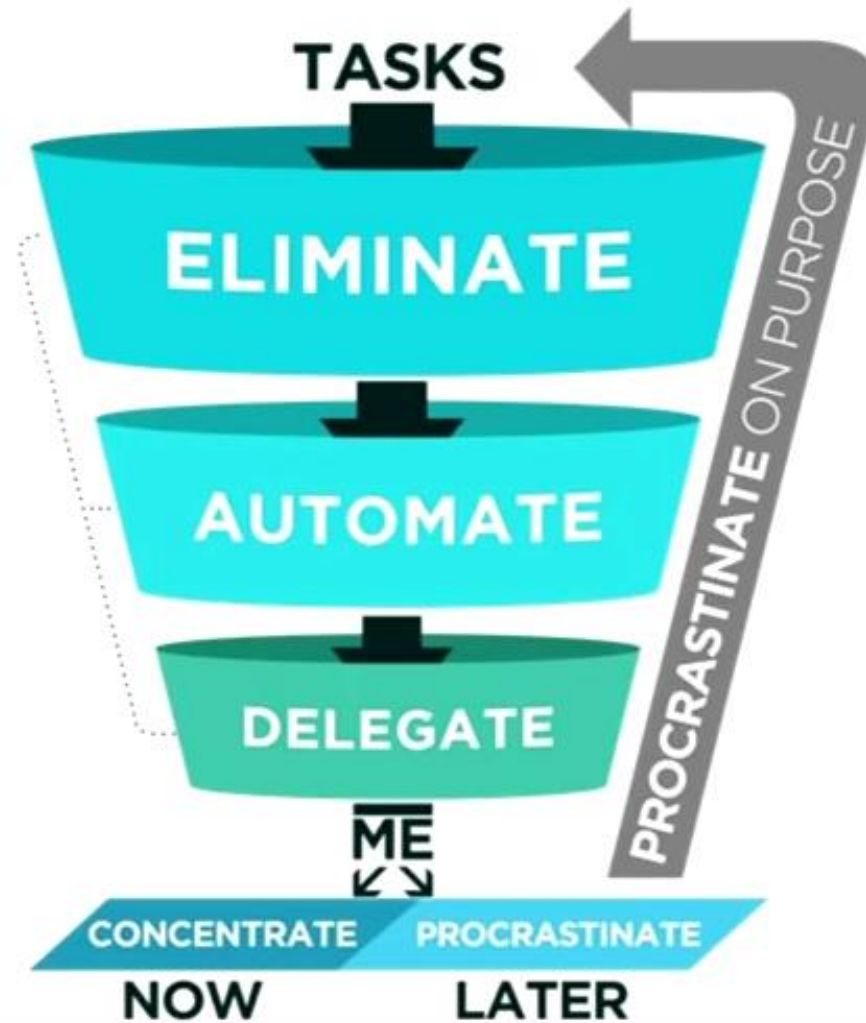
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NOW

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The Focus Funnel™



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EBP and Health Promotion

- Evidence-based practice reduces wide practice variations by synthesizing relevant literature, standards (international, national, and local), cost analyses, clinical expertise, and client preferences (Pender, Murdaugh, & Parsons, 2011).
- The fact that evidence-based practice extends beyond relevant literature to include **client preferences** is a significant aspect of health-promotion practice.

What strategy can be used to change behavior? Self-efficacy

- Most closely associated with **social cognitive theory** (Bandura, 1986), which focuses on the psychology and social aspects of behavior.
- Social cognitive theory is based on the belief that **humans do not live in isolation**; they are always **learning** and **behaving** in response to their environments and individual thought processes.
- These environments may include the workplace or the larger society (Bandura, 2004).
- Individuals are not simply products of their environments, but **create** those environments, a concept known as **reciprocal determinism** (Bandura, 2004).

Negative Self-Efficacy

- People **must believe** they have the power to stop negative behaviors (e.g., smoking) and adopt positive behaviors (e.g., regular exercise).
- Nurses assist employees to increase their self-efficacy by
 - planning **mastery** experiences,
 - **modeling** healthy behaviors, and
 - encouraging **significant others** to support the employee.
- Self-efficacy was a **significant determinant** of health-promoting behavior in **86%** of the studies they reviewed (Pender, Bar-Or, Wilk, & Mitchell, 2002) .

Motivational Interviewing builds self-efficacy.

- Client-centered therapeutic approach to **enhancing readiness** for change by supporting clients while they explore and resolve **ambivalence** (Hettema, Steele, & Miller, 2005).
- Individuals identify the behavior they intend to change and **how** they might **begin** the behavior change process.
- Nurse facilitates the process by asking **open-ended** and **clarifying** questions to assist individuals to articulate steps they will take to begin the process of behavior change.
- Motivational interviewing prioritizes **small, incremental steps** to assist individuals making a successful change.

Steps (Is the client **ready** to change?)

1. Are you interested in quitting smoking? (If no, then use “**precontemplation**” strategies).
2. Are you thinking about quitting smoking soon? (**contemplation**).
3. Are you ready to plan how you will quit smoking? (**preparation**).
4. Are you in the process of quitting smoking? (**action**).
5. Are you trying to stay smoke-free after quitting? (**maintenance**).

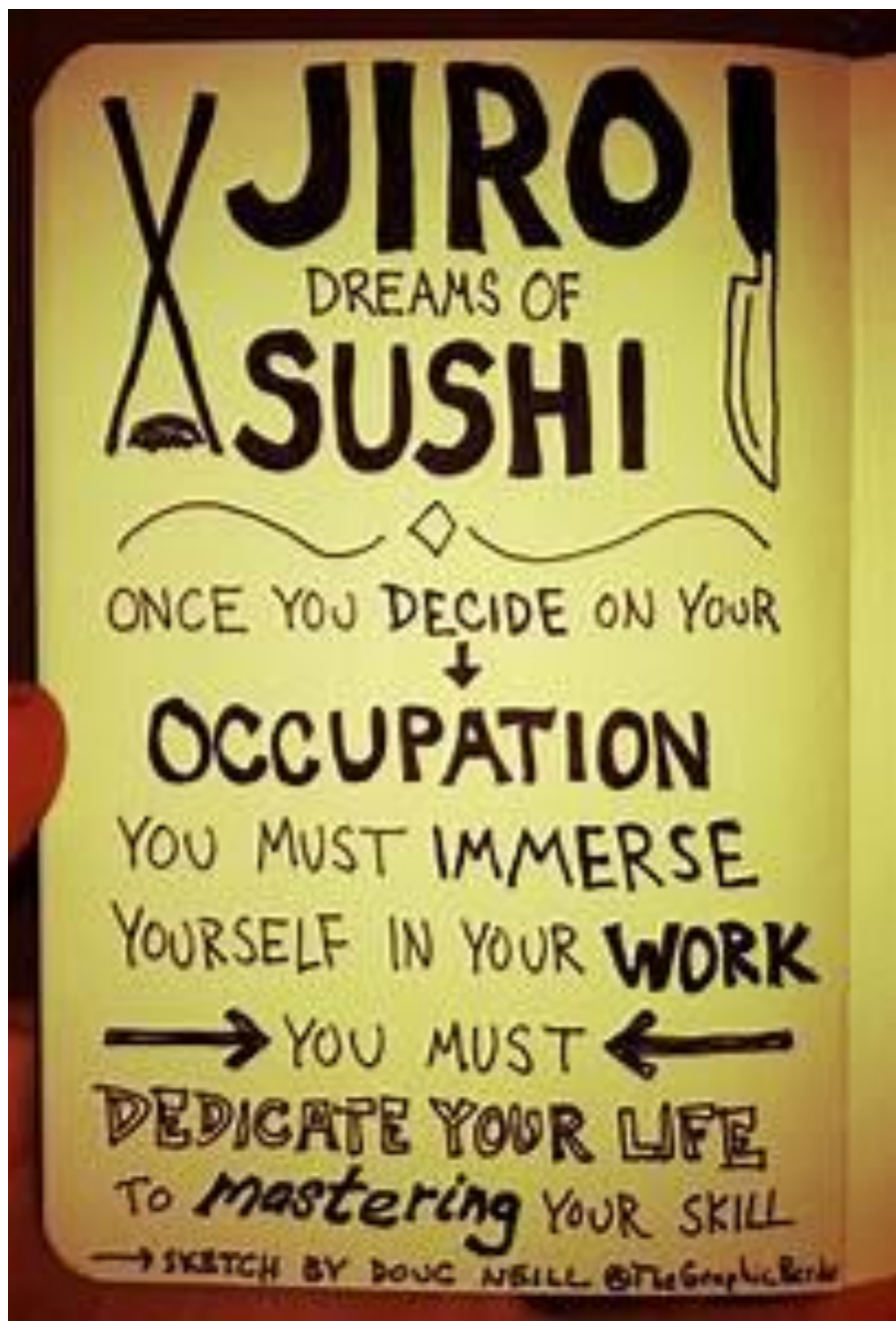
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JIRO

DREAMS OF SUSHI





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