

Why Do Less Than 10% of Canadian Women Take Menopausal Hormone Therapy

June 5, 2018

Nese Yuksel, BScPharm, PharmD, FCSHP, NCMP

Professor

Faculty of Pharmacy and Pharmaceutical Sciences

University of Alberta

Objectives

By the end of the presentation, participants should be able to:

- Discuss the current status of potential MHT use in Canada.
- Provide reasons for the low uptake of MHT.
- Discuss issues to MHT decision making by women.
- Review potential reasons for reluctance for MHT from health care providers.

Presenter Disclosure

Presenter's Name: **Nese Yuksel**

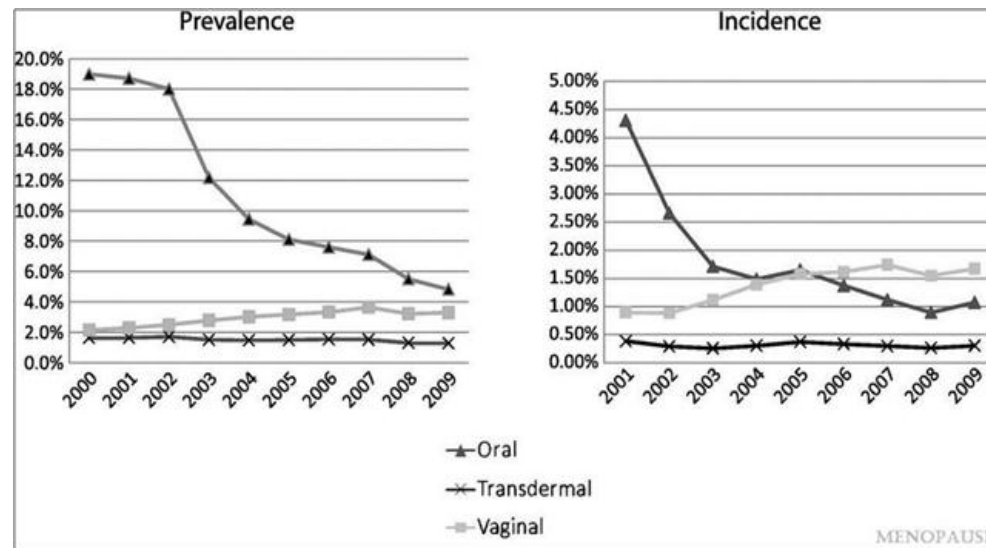
- I have been on Advisory Boards/Speakers Bureau's for Pfizer Canada, Aspen Pharmaceuticals, and Merck

Introduction

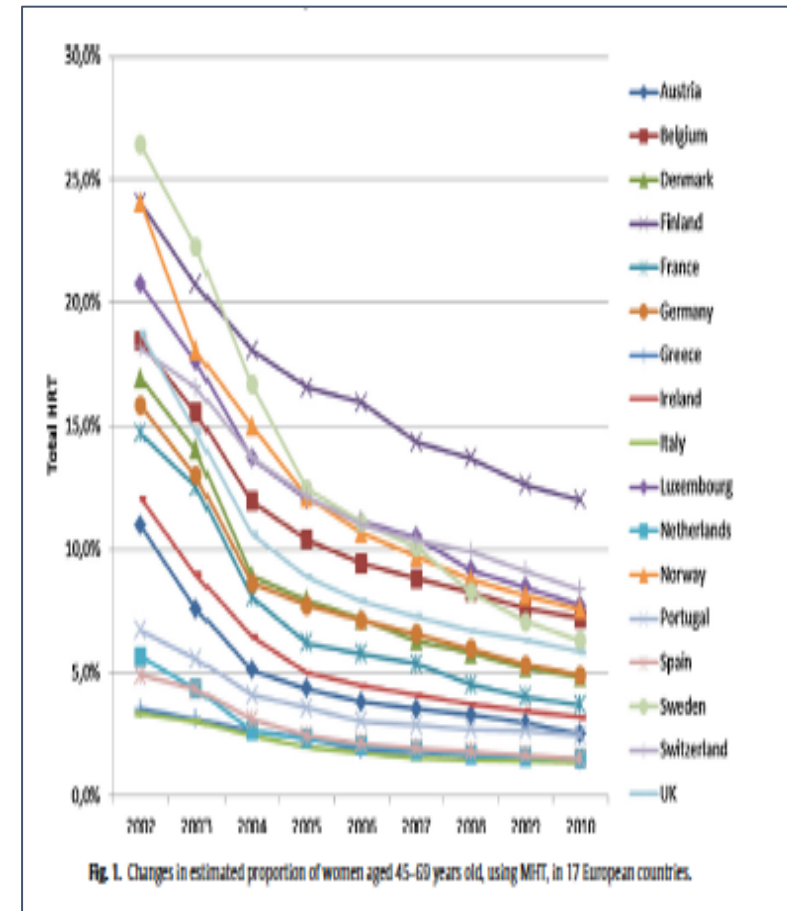
- MHT most effective agent for managing menopausal symptoms.
- Despite this, there is a significant care gap in prescribing MHT.
 - Women may have reservations in taking MHT.
 - Health care providers may be reluctant to prescribe.
- Impact of the WHI study initial study findings continues to this day.

Changes in MHT Use Worldwide

MHT use declined dramatically worldwide after the WHI EPT arm initial results, from ~40% in the 1990's (US data)¹ to reports of 12 – 16% worldwide.



Steinkellner et al. Menopause. 2012;19:616-621



Ameye et al Maturitas. 2014;79(3):287-291.

What About Canada?

Menopause: The Journal of The North American Menopause Society

Vol. 25, No. 1, pp. 46-53

DOI: 10.1097/GME.0000000000000954

© 2017 by The North American Menopause Society

Hormone therapy use in the Canadian Longitudinal Study on Aging: a cross-sectional analysis

Christy Costanian, MSc, Heather Edgell, PhD, Chris I. Ardern, PhD, and Hala Tamim, PhD

Canadian Longitudinal Study on Aging

- MHT use in women aged 45 – 85 years, n=10,141
- 9.5% of sample reported current MHT use

Costanian et al. *Menopause* 2018;25(1):46

Hormone Therapy Use in Canada

TABLE 1. *Distribution of hormone therapy (HT) use characteristics in the sample*

HT use	Total sample no.	% ^a	Past ^b no.	% ^c	Current ^b no.	% ^c	P
Age at HT initiation							
<45 y	300,560	4.4	374	16.8	106	11.9	<0.001
45-49 y	632,740	9.3	712	32.0	264	29.8	
50-54 y	747,769	11.0	800	35.9	332	37.4	
>54 y	360,146	5.3	343	15.4	185	20.9	
HT use duration							
<1 y	580,172	24.7	666	28.1	204	21.5	<0.001
1-4 y	508,942	21.7	534	22.4	226	24.0	
5-9 y	460,231	19.6	555	23.3	174	18.4	
>9 y	796,565	34.0	624	26.2	342	36.2	
HT type							
Estrogen and progesterone	725,126	35.5	762	37.9	301	33.4	<0.001
Estrogen	932,549	45.6	967	48.1	346	38.4	
Progesterone	163,695	8.0	131	6.50	84	9.3	
Estrogen cream or gel applied to skin	197,350	9.7	143	7.10	142	15.8	
IUD with progesterone	24,882	1.2	8	0.4	28	3.1	

Costanian et al. Menopause 2018;25(1):46

Hormone Therapy Use in Canada

Lower Likelihood of MHT use:

Nonwhite, ethnic
Smokers
Obesity
Breast cancer
Current employed

Associated with MHT Use:

Alcohol consumption
Presence of mood disorders
Exercise

Of note:

- Use in <50 to 69 year old = **13%**; <50 to 59 year old = **16%**
- Self-report by women
- Unclear if compounded BHT included.

Costanian et al. Menopause 2018;25(1):46



What Influences Risk Perception?



Risk Perception

Complex interplay between:

- Knowledge
- Values
- Biases
- Past Experiences
- Perceptions gained in our society



Risk Perception

- Evidence shows that people often seek out information that supports their own opinions/beliefs.
- Once a belief is made, rather than shedding beliefs, science and facts will be rejected.
- Risk perception once made, takes a long time to change.
- In strongly opposing views, new information can further polarize the views.
 - People will reinforce prior perceptions of risk.

Gluckman PD. PMCSA Series Part 2. November 2016, Lewandosky et al, PLOS One 2013;8(10), Kortenkamp Sci Communication 37(3):287-313

Risk Perception

- Uncertainty or diversity in scientific information or by “experts” can lead to fear and mistrust.
- “What we hear is what we know”: Risks can be perceived to be higher if publicized more frequently.
- Public perception of risk is greatly influenced by conventional mass media, social media and popular culture (i.e. celebrities).
 - Social media can draw on the emotional and subjective opinions.

Gluckman PD. PMCSA Series Part 2. November 2016, Lewandosky et al, PLOS One 2013;8(10), Kortenkamp Sci Communication 37(3):287-313

Facts alone literally have no meaning until our emotions and instincts and experiences and life circumstances give rise to how we feel about those facts.

Ropeik D, 2014, Feelings Matter more Than Facts Alone

<http://www.ingsa.org/conference-news/feelings-matter-more-than-facts-alone-a-challenge-and-opportunity-for-science-advisors/>

Decision Making with Menopause

- Menopause decisions are complex and emotionally driven, especially with hormone therapy.
- Decisions are not a single event but evolve over time.
- MHT benefits often subjective (i.e. symptoms) or preventative (i.e. bone loss); while risks cause fear in most women (i.e. breast cancer).
- Changing information on safety profiles and shifting role of MHT has led to confusion and anxiety, as well as mistrust in the medical establishment.

Carpenter et al Maturitas. 2011;70(1):10–15, Pines Climacteric 2008;11(6):443-446

Landmark trial overstated HRT risk for younger women

Results of a major trial of hormone therapy may have been misleading

Lauren Vogel | CMAJ | April 12, 2017

CLIMACTERIC, 2017
VOL. 20, NO. 2, 91-96
<http://dx.doi.org/10.1080/13697137.2017.1280251>

 Taylor & Francis
Taylor & Francis Group

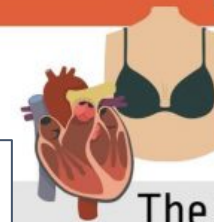
REVIEW

The evidence base for HRT: what can we believe?

R. D. Langer

Principal Scientist, Jackson Hole Center for Preventive Medicine, Jackson, WY, USA; Associate Dean for Clinical and Translational Research and Professor of Family Medicine, University of Nevada Reno School of Medicine, Reno, NV, USA

MILLIONS MISLED ABOUT HRT RISKS



A researcher involved in a major trial that linked hormone replacement therapy (HRT) to breast cancer and heart disease says the results were exaggerated for publicity

The study

The Women's Health Initiative (WHI) trial of estrogen plus progestin is one of the largest HRT studies ever conducted

TWO PROBLEMS

1 Study leaders stopped the trial early in 2002 citing an increase in breast cancer, as well as heart attacks

These increases were not statistically significant

2 The study focused on women over age 60, but the results were generalized to younger women

The fallout

Many women now believe that hormone therapy is dangerous, even though the risks for younger women are low

HRT use plummeted by as much as **80%**

For women who stopped HRT, risk of hip fracture increased **55%**



18,601 to 91,610

American women died prematurely between 2002 and 2012 as a result of avoiding estrogen therapy

<https://cmajnews.com/2017/04/12/landmark-trial-overstated-hrt-risk-for-younger-women-109-5421/>

Decision Making with Menopause

- Risk numbers (and especially statistical interpretation) are difficult to understand and interpret for most people.
- Vast amount of information about MHT can make it difficult to decipher – even by experts and provides for continued debate.
- Allowing for discourse of MHT information in the media, internet and social media.
- Studies have reported primary MHT information sources include media, internet, and social network (ie friends, family, etc)

Carpenter et al Maturitas. 2011;70(1):10–15, Pines Climacteric 2008;11(6):443-446, Colombo et al Eur J Obstet Gynec Reprod Biol 2010;153:56-61, Siyam, et al. Menopause 2018;25(7)

Evidence vs Perception

“Perception-wise, in the post-WHI era, risks are over-valued and generalized to the whole postmenopausal population and to all forms of hormone therapy.”

Pines A. Climacteric 2008;11(6):443-446



Media

SPECIAL EMBARGO FOR RELEASE: 8:30 A.M. (CT) TUESDAY, JULY 9, 2002

News Conference

Hormone Therapy Study Stopped Due to Increased Breast Cancer Risk

When: 9:30am ET July 9, 2002

Where: Ballroom, National Press Club

529 - 14th Street, NW 13th floor

Washington, DC 20045

For More Information: Contact National Heart, Lung and Blood Institute at 301/496-4236.

EMBARGOED JAMA INFORMATION: 8:30 A.M. (CT) Tuesday, July 9, 2002

Media Advisory: To contact Jacques E. Rossouw, M.D., call the NHLBI Communications Office, 301/496-4236.

To contact Suzanne W. Fletcher, M.D., M.Sc., call Donna Burtanger at 617/432-3991.

Health Risks Outweigh Benefits for Combined Estrogen plus Progestin Clinical Trial Stopped Early in Major Study

CHICAGO -- Researchers have stopped the estrogen plus progestin portion of the Women's Health Initiative, a clinical trial designed to assess the major health benefits and risks of the most commonly used hormone preparation in the United States on healthy menopausal women, after overall health risks were found to exceed the health benefits, according to an article to be published in the July 17 issue of The Journal of the American Medical Association (JAMA). The study is being released early on the JAMA website (www.jama.com) because of the importance of the researchers' findings.

BBC NEWS WORLD EDITION

You are in: Health
Wednesday, 10 July, 2002, 11:29 GMT 12:29 UK

HRT linked to breast cancer



The study examined estrogen and progestin

Women who take hormone replacement therapy may be at increased risk of breast cancer, heart disease and stroke, a study suggests.

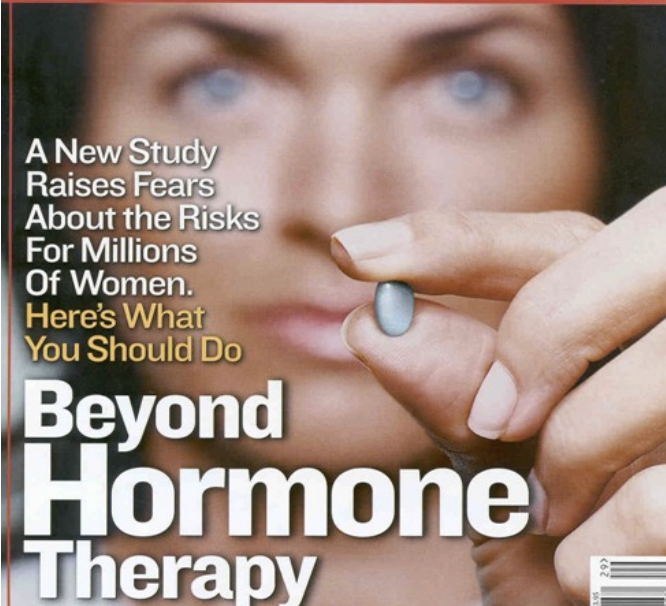
Early results from a major clinical trial in the US indicate that long term use of one type of HRT can seriously damage women's health.

The findings have caused such concern that authorities in the US have ordered researchers to end "hormone therapy trials" as soon as possible.

- Africa
- Americas
- Asia-Pacific
- Europe
- Middle East
- South Asia
- UK
- Business
- Entertainment
- Science/Nature
- Technology
- Health**
- Medical notes
- Talking Point
- Country Profiles
- In Depth
- Programmes

Newsweek

July 22, 2002



A New Study Raises Fears About the Risks For Millions Of Women. Here's What You Should Do

Beyond Hormone Therapy

Brown S Climacteric 2012;15(3):275-280