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The Prevalence of Complementary and Alternative Medicine used in Postmenopausal Women at Srinagarind Hospital

Nisanat Booning, MD,
Sukree Soontrapa, MD,
Srinaree Kaewrudee, MD,
Chompilas Chongsomchai, MD,
Bandit Chumworathayi, MD,
Teerayut Temtanakitpaisan, MD.

Department of Obstetrics and Gynecology, Faculty of Medicine, Khon Kaen University, Khon Kaen 40002, Thailand

ABSTRACT

Objective: To study the prevalence, types, sources of information, and physicians' awareness regarding the usage of complementary and alternative medicine (CAM) in postmenopausal women at Srinagarind Hospital.

Study design: Cross sectional descriptive study.

Materials and methods: A survey was conducted between July and October 2013 in 200 postmenopausal women with general gynecologic problems who attended the outpatient department of Obstetrics and Gynecology, Srinagarind Hospital, a tertiary care hospital, in northeastern Thailand. Validated questionnaires for determining the prevalence, types, sources of information, and awareness of the physicians in CAM were used.

Results: The mean age of the participants was 56.1 years. The prevalence of current CAM use was 63.0%. Ya satree was the most commonly used (18.6%) followed by fermented herb juice (16.5%) and chlorophyll (13.1%). The most important sources of information of participants in deciding to use CAM was the recommendation of acquaintances or friends (79.4%) followed by advertisements in newspaper or magazine (16.7%) and advertising on television (13.5%). Only 28.0% and 19.5% of the participants were asked by the physician about their history of CAM use and informed by the physician about the potential risk of CAM such as herb-drug interaction and adverse effects, respectively.

Conclusions: More than 60% of postmenopausal women interviewed at Srinagarind Hospital used CAM. Most participants (72%) never had asked about their history of CAM use by the physician. More education on this issue should be provided to patients in order to reduce unnecessary CAM used, and CAM used should be a part of routine history taking in all patients.

Keywords: complementary and alternative medicine, postmenopausal women, physician's awareness

Correspondence to: *Nisanat Booning, MD., Department of Obstetrics and Gynecology, Faculty of Medicine, Khon Kaen University, Khon Kaen 40002, Thailand, E-mail: tobee_b@hotmail.com, Tel: 086-7199139*

Introduction

The use of complementary and alternative medicine (CAM) for health maintenance and disease management is steadily rising worldwide. Some types of CAM are used in the absence of any documented benefit and can potentially be dangerous or fraudulent claims are often made about efficacy of CAM, and some substances marketed as CAM are counterfeit. The primary users usually are women, who are frequently making decisions regarding treatment options without advice from physicians. Nowadays the use of CAM in gynecologic patients also seems to be rising in Thailand[1,2], perhaps due to misunderstandings about the physiology of menstruation and anxiety about beauty and health, especially in postmenopausal women. It seems that the number of visits to alternative care providers has exceeded the number of visits to gynecologists. Gynecologists are in an excellent position to guide patients in their treatment choices, counseling them about potentially dangerous alternative treatments and supporting their use of potentially beneficial ones.

At the outpatient department of Obstetrics and Gynecology, Srinagarind Hospital, a tertiary care hospital, in northeastern Thailand, patients with a history of CAM use are sometimes seen with abnormal vaginal bleeding, especially vaginal bleeding after menopause, abnormal vaginal discharge, or pelvic pain. On examination, underlying causes for these symptoms cannot be found. Unexplained complications or adverse reactions in postmenopausal patients receiving hormone replacement therapy may be the result of taking CAM[3].

CAM may interact with other drugs in both synergistic and antagonistic ways. CAM is not suitable for people with high blood pressure or diabetes, pregnant women and women who are breastfeeding. CAM may increase risk of kidney stones, gout and liver toxicity[4]. CAM may unexpectedly cause adverse events. For example, ginseng may cause headache, nausea, vomiting, and diarrhea. Some herbal products contain hormones and may increase the chance of thromboembolism, especially when taken with medications containing the hormone estrogen.

Some medications, such as anticoagulants, have a narrow therapeutic index when taken with certain herbal products such as ginseng, garlic, ginger, ginkgo, green tea, and some health supplements such as fish oil, may adversely affect patients by unexpectedly enhancing bleeding tendency[5]. Kava could cause a synergistic effect of anesthetic drug[6].

Herbal products can cause toxicity in one of three ways: (i) the products can be adulterated; (ii) the labels can recommend dosages that exceed appropriate use and cause toxicity, even when the product is safe in appropriate dosages; and (iii) even when they are of good quality and taken in the correct dosage, these products can interact with other supplements and pharmaceutical agents.

A study of Asian postmenopausal women in 2010 found that 37.0% used herbal products, rising to 85% in Thailand[2]. A similar study in Europe in 2010 found that the use of herbal products and other alternative medicine was 33.5%[7]. A survey in Washington State exploring use of alternative therapies for menopause revealed that these were used by 76% of women[8]. The trend towards increased use of CAM is worrying because patients generally lack correct information about adverse reactions of CAM and their physicians are not made aware of CAM usage. In addition to potential risks, patients and physicians should be aware of two concerns. First, a lot of money may be spent out of the patients' pockets, and second, patients may postpone effective therapy or treatment, which can be significant for the better prognosis of their diseases.

In Thailand, especially in the Northeast region, which is the location of Srinagarind Hospital, there has been still no study on the prevalence of CAM used in postmenopausal women. This study includes the types of CAM (biologically based therapies) used, sources of

information to use CAM, and physician's awareness regarding the usage of CAM in postmenopausal women.

The primary objective of this study was to determine the prevalence of CAM used in postmenopausal women and the secondary objective was to determine types, sources of information, and physicians' awareness regarding the usage of complementary and alternative medicine (CAM) in postmenopausal women at Srinagarind Hospital.

Materials and Methods

A cross-sectional study was conducted in the outpatient department of Obstetrics and Gynecology, Faculty of Medicine, Srinagarind Hospital, Khon Kaen University between July and October 2013. Srinagarind Hospital is a tertiary care hospital, in northeastern Thailand.

Inclusion criteria

- Postmenopausal women of any age who waiting to see doctors at the outpatient department of Obstetrics and Gynecology, Faculty of Medicine, Srinagarind Hospital, Khon Kaen University

Exclusion criteria

- Postmenopausal women who did not consent to participate in the study.
- Postmenopausal women with disabilities. Can't help themselves.

The subjects were asked to complete self-administering anonymous questionnaires with a research assistant nurse to answer any questions they may have.

The present study protocol and questionnaire were approved by the ethics committee of Khon Kaen University.

Questionnaires

The questionnaire consisted of three sections;

1. Demographic data; explored information including age, body weight, height, underlying diseases, occupation, education, smoking, coffee and alcohol intake.

2. Gynecological data; explored the information including chief complaint, parity, age of menopause, abnormal uterine bleeding, and hormone replacement therapy.

3. Questions about CAM use and awareness of the physicians; explored the information including the current use of CAM (within the last 3 months), types of CAM, main sources of information of participants in deciding to use CAM, known about adverse effect, and awareness of their physicians by represent from prevalence of the participants were asked by the physician about their history of CAM use and informed by their physician about the potential risk of CAM such as herb-drug interaction and adverse effects .

After participants were completed questionnaire, research assistant nurse was provided advice about adverse effect of CAM.

Reliability assessment of the questionnaire:

Initially, after the design the questionnaires, was used by 10 postmenopausal women to determine whether the questions were clear, understandable.

The participants take the times for answer the questionnaire about 5 minute and a research assistant nurse was interviewed them if they can't reading or writing.

Operational definitions

Complementary and alternative medicine (CAM) in this study refers only to biologically based therapies which include dietary supplements and herbal products. BMI was classified into 4 WHO categories: underweight (< 18.50 kg/m^2), normal weight (18.50 - 24.99 kg/m^2), overweight (≥ 25.00 kg/m^2), and obese (≥ 30.00 kg/m^2).

Statistical analysis

Sample size was calculated using a formula for prevalence estimation. From the Huang K-E, et al.[2] research at 2010 in Thai postmenopausal women the prevalence of CAM (herbal) consumption was 85%. When the precision error of estimation (d) = 6% of prevalence (d = 0.05), the sample size was 195 (about 200) cases.

Statistical analysis was performed using SPSS 16.0 (SPSS Inc). The data were presented as mean ± SD, or as percentages. The X^2-test was the statistical test of choice to evaluate the association between

demographic data and data regarding gynecologic symptoms and CAM use. A value of $p < 0.05$ was set as the significance criterion.

Result

The mean age of the participants was 56.1 years. The baseline clinical characteristics of 200 participating women and data regarding gynecologic symptoms were shown in Table 1. Menopause most commonly occurred between 46 and 50 years of age (39.0%), followed by ages 51-55 years (34.5%). Early menopause between 41 and 45 years of age was reported by 20.5% of participants.

The prevalence of CAM use in postmenopausal women was 63%. Types of CAM used by postmenopausal women are shown in Fig. 1. Ya Satree (a drug extracted from herbal products, containing three major components: (i) a component that has a laxative effect, can increase appetite and decrease nausea, with ingredients such as peppermint oil, safflower oil, honey, orange peel, licorice, mace, cloves, ginger, galangal, lemongrass, turmeric, camphor, and pepper; (ii) extracts from herbs that have estrogenic activity, including the Wan chak mot luk, Kwaokreu kao and Angelica sinensis; (iii) alcohol) was the most commonly used (18.6%) followed by fermented herb juice (16.5%) and chlorophyll (13.1%). Sources of information about CAM used by postmenopausal women were shown in Fig. 2. In most cases, participants followed the recommendations of acquaintances or friends (79.4%) followed by advertisements in newspapers or magazines (16.7%) and advertising on television (13.5%).

The proportion of physicians aware of their patients' CAM usage was shown only 28.0% and 19.5% of the participants were asked by the physician about their history of CAM use and informed by the physician about the potential risk of CAM such as herb-drug interaction and adverse effects, respectively. Only 33.5% of patients knew that CAM could have adverse effects.

The associations between baseline clinical characteristics and data regarding gynecological symptoms with CAM use were expressed as ORs are shown in Table 2. Statistically significant associations were not found for most characteristics but significant associations were found for patients who knew about adverse effects of CAM and physicians advising that CAM could cause herb-drug interaction and adverse effects associated with a decrease rate of CAM used. The unadjusted OR were 0.62 (95% CI 0.47–0.826) and 0.64 (95% CI 0.44–0.93), respectively

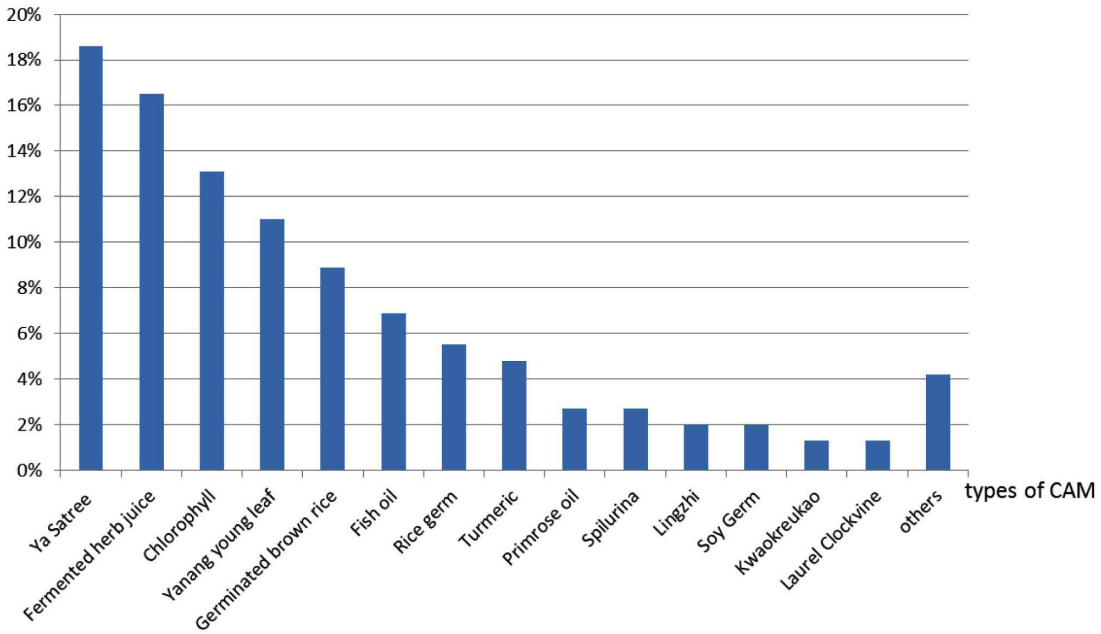
Table 1. Baseline clinical characteristics and detail of each demographic data regarding gynecologic symptoms of participants.

Characteristics	N (=200)	%
Age group (year)		
≤ 49	19	9.5
50-59	136	68.0
≥ 60	45	22.5
BMI (kg/m²)		
< 18.50	5	2.5
18.50 - 24.99	123	61.5
≥ 25.00	62	31.0
≥ 30.00	10	5.0
Underlying disease		
Diabetes	19	9.5
Hypertension	44	22.0
Dyslipidemia	52	26.0
Thrombocytopenia	0	0
Other	51	25.5
Education status		
Primary school graduate	58	29.0
High school graduate	38	19.0
University graduate	104	52.0
Demographic data	**N (=200)**	**%**
Age at menopause		
< 40 years	5	2.5
40-45 years	41	20.5
46-50 years	78	39.0
51-55 years	69	34.5
> 55 years	7	3.5
Postmenopausal bleeding		
Yes	52	26.0
No	148	74.0
HRT		
Yes	46	23.0
No	154	77.0
Chief complaint		
Leucorrhea	9	4.5
Pelvic pain	14	7.0
AUB	29	14.5
Check Pap	104	52.0
Menopausal symptoms	33	16.5
Others	11	5.5

HRT, hormone replacement therapy; AUB, abnormal uterine bleeding

Table 2. The associations between baseline clinical characteristics and data regarding gynecologic symptoms with CAM used.

Factors	Subjects without history of CAM use No. of patients (%)	Subjects with history of CAM use No. of patients (%)	OR (95% CI)
Age group (year)			
≤ 55	42 (21.0%)	63 (31.5%)	1.31 (0.73-2.33)
56-60	63 (31.5%)	104(52.0%)	1.21 (0.55-2.66)
≥ 65	68(34.0%)	117 (58.5%)	0.87 (0.29-2.55)
Education status			
Primary school graduate	19(9.5%)	29 (14.5%)	0.86 (0.44-1.68)
High school graduate	50(25.0%)	92(46.0%)	1.29 (0.69-2.42)
University graduate	37(18.5%)	67(33.5%)	1.13 (0.63-2.07)
Age at menopause			
< 40 years	2(1.0%)	3(1.5%)	1.13 (0.18-6.97)
40-45 years	16(8.0%)	25(12.5%)	1.11 (0.55-2.25)
46-50 years	35(17.5%)	43(21.5%)	1.73 (0.96-3.11)
51-55 years	20(10.0%)	49(24.5%)	1.20 (0.98-1.48)
> 55 years	1(0.5%)	6(3.0%)	0.27 (0.03-2.32)
Postmenopausal bleeding	20(10.0%)	32(16.0%)	1.08 (0.56-2.08)
HRT	14(7.0%)	32(16.0%)	1.14 (0.96-1.43)
The subjects were asked by the physician about their history of CAM use	26(13.0%)	30(15.0%)	1.73 (0.92-3.25)
the subjects were informed by the physician about the potential risk of CAM	22(11.0%)	17(8.5%)	0.64(0.44-0.93)
patients who knew about adverse effects of CAM	37(18.5%)	30(15.0%)	0.62(0.46-0.82)



*multiple types of CAM use allowed.

Fig. 1. Types of CAM used by postmenopausal women.

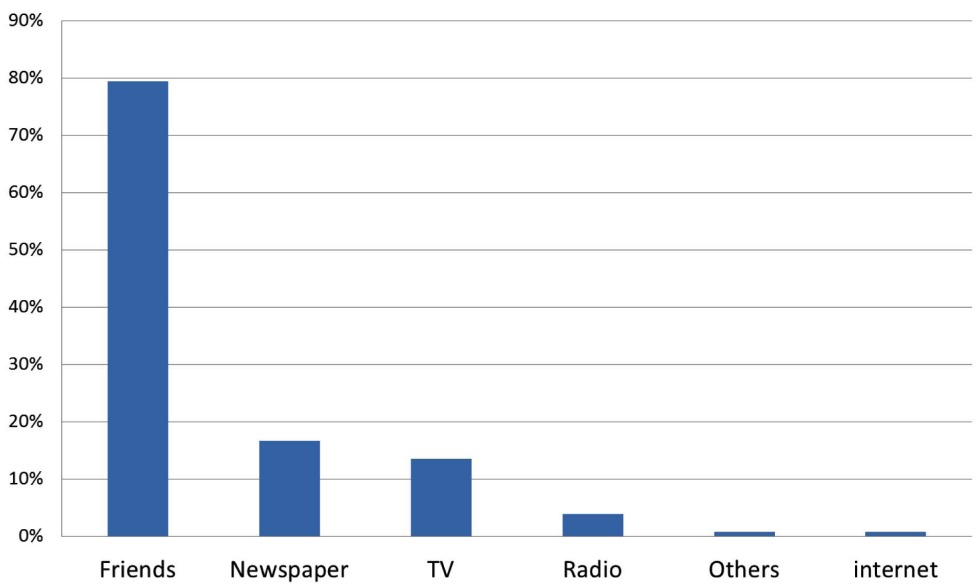


Fig. 2. Sources of information about CAM used by postmenopausal women.

Discussion

This study found that the prevalence of CAM used by postmenopausal women attending the outpatient department of Obstetrics and Gynecology, Faculty of Medicine, Srinagarind Hospital was 63.0%. This is comparable with results from previous studies which found the use of CAM to range from 33.5% to 85.0%[2, 7]. Another previous study of Thai women found that 54.7% consumed at least one kind of nutritional supplement[9]. The prevalence of CAM use in this study was quite higher than previous studies due to the difference of the study population. The prevalence reported in this study might be an underestimate because participants might have a fear of blame, or might not be able to remember recent use of herbal products or dietary supplements. The reluctance of patients to inform their physicians of their use of CAM may create barriers to the best practice of medicine. A study in the US found that 71.5% of patients using these approaches did not inform their physicians of this[10]. In a 5-year prospective cohort study, following women in San Francisco with newly diagnosed breast cancer, 72% were using at least one form of CAM in the management or treatment of their breast cancer. Of these women, 54% informed their physician of CAM use, whereas 94% discussed their conventional treatment with their CAM provider[11]. The reasons for the patients' reluctance to inform their physician of CAM use included anticipation of physician disinterest, of negative responses and of unwillingness or inability on the part of the physician to contribute useful information. In addition, some patients believed that their use of CAM was irrelevant to their conventional treatment.

Ya Satree was found to be the most commonly used (18.6%) followed by fermented herb juice (16.5%) and chlorophyll(13.1%). Most respondents followed recommendations of acquaintances or friends (79.4%) followed by advertisements in newspaper or magazines (16.7%) and advertising on television(13.5%). The recommendations of acquaintance people or friends to use CAM were strong influences in this study. Additionally, more advertisement in newspapers or magazines and more advertising on television, without any warnings about the potential adverse effects or prohibitions from responsible organizations, may be another cause of the rise in CAM use. A complete medical history should include details of the patient's use of CAM, because CAM can have actions ranging from estrogenic to anticoagulant.

This study found that only 33.5% of participants were aware that herbal products and dietary supplements might result in synergistic or antagonistic effects to some drugs and could cause adverse reactions or complications. Only 28.0% the participants were asked by the physician about their history of CAM use as a part of a medical history, and only 19.5% of the participants were provided advice about the impacts or disadvantages of using herbal products and dietary supplements by the physician. These figures may be underestimates, because some participants might not be able to accurately recall their previous discussion with the physician.

Factors that may decrease number of patients deciding to use CAM are patients' knowledge about adverse effects of CAM and physicians advising that CAM can cause herb-drug interaction and adverse effects.

Strengths of this research are that it is the first study of CAM use by postmenopausal women in a large hospital in northeastern Thailand, and it is the first study which focuses on the awareness of physicians on CAM use.

Limitations of this research are that some participants might not give the true information for fear of blame, and participants might not be able to recall their previous discussions with their doctor. Time limitation in the outpatient situation may be another confounding factor. This research could not show any possible association between the use of herbal products and dietary supplements and pelvic pain, vaginal abnormal discharge, abnormal bleeding, might be due to small sample size.

Conclusions

More than 60% of postmenopausal women at Srinagarind Hospital were using CAM at the time of

interview. Most participants (72%) never had asked about their history of CAM use by the physician. More education on this issue should be provided to patients in order to reduce unnecessary CAM use, and CAM use should be a part of routine history taking in all patients.

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ความชุกของการใช้สมุนไพรและผลิตภัณฑ์เสริมสุขภาพในสตรีวัยหมดประจำเดือนในโรงพยาบาลศรีนครินทร์

นิศานาถ บุญอิ้ง, สุกรี สุนทราภา, ศรีนารี แก้วฤดี, โฉมพิลาศ จงสมชัย, บัณฑิต ซุมวรฐายี, ธีระยุทธ เต็มธนะกิจไพศาล

วัตถุประสงค์ *: เพื่อศึกษาความชุกของการใช้สมุนไพรและผลิตภัณฑ์เสริมสุขภาพในสตรีวัยหมดประจำเดือนในโรงพยาบาลศรีนครินทร์*

วัตถุประสงค์รอง *: เพื่อศึกษาถึงประเภทของสมุนไพรและผลิตภัณฑ์เสริมสุขภาพที่ใช้, แหล่งที่มาของข้อมูลที่ทำให้ต้องการใช้สมุนไพรและผลิตภัณฑ์เสริมสุขภาพ, ความชุกของการได้รับคำแนะนำและความตระหนักของแพทย์เกี่ยวกับการใช้สมุนไพรและผลิตภัณฑ์เสริมสุขภาพในสตรีวัยหมดประจำเดือน*

วัสดุและวิธีการ *: การศึกษาแบบ cross sectional descriptive study โดยศึกษาในสตรีวัยหมดประจำเดือนที่มาเข้ารับการตรวจรักษาที่ห้องตรวจนรีเวชกรรมของโรงพยาบาลศรีนครินทร์ ระหว่างเดือนกรกฎาคม ถึงเดือนตุลาคม 2556 จำนวน 200 ราย โดยการตอบแบบสอบถามด้วยตนเองและมีผู้ช่วยวิจัยตอบ และอธิบายข้อมูลแบบสอบถามที่ผู้เข้าร่วมวิจัยมีความสงสัย โดยแบบสอบถามนั้นเกี่ยวข้องกับความชุกของการใช้สมุนไพรและผลิตภัณฑ์เสริมสุขภาพ, ประเภทของสมุนไพรและผลิตภัณฑ์เสริมสุขภาพที่ใช้, แหล่งที่มาของข้อมูลที่ทำให้ต้องการใช้สมุนไพรและผลิตภัณฑ์เสริมสุขภาพ, ชุกของการได้รับคำแนะนำและความตระหนักของแพทย์เกี่ยวกับการใช้สมุนไพรและผลิตภัณฑ์เสริมสุขภาพ แบบสอบถามและงานวิจัยได้รับการรับรองจากสำนักงานคณะกรรมการจริยธรรมการวิจัยในมนุษย์ มหาวิทยาลัยขอนแก่น*

ผลการศึกษา *: ความชุกของการใช้สมุนไพรและผลิตภัณฑ์เสริมสุขภาพในสตรีวัยหมดประจำเดือนในโรงพยาบาลศรีนครินทร์ คือ 63%, ชนิดของสมุนไพรและผลิตภัณฑ์เสริมสุขภาพที่ใช้มากที่สุด ได้แก่ ยาสตรี (18.6%) รองลงมาคือ น้ำหมักสมุนไพรและผลไม้ (16.5%) และคลอโรฟิลล์ (13.1%) ตามลำดับ แหล่งที่มาของข้อมูลที่ทำให้ต้องการใช้สมุนไพรและผลิตภัณฑ์เสริมสุขภาพมากที่สุดคือ ได้รับคำแนะนำจากคนรู้จักหรือเพื่อน (74.9%) รองลงมาคือ โฆษณาในหนังสือพิมพ์และนิตยสาร (16.7%) และ โฆษณาในโทรทัศน์ (13.5%), ผู้เข้าร่วมวิจัย 28% เคยมีแพทย์ซักประวัติการใช้สมุนไพรและผลิตภัณฑ์เสริมสุขภาพ และมีเพียง 19.5% ของผู้เข้าร่วมวิจัย ที่เคยมีแพทย์ให้คำแนะนำว่าการใช้สมุนไพรและผลิตภัณฑ์เสริมสุขภาพมีโอกาสเกิดผลข้างเคียงไม่พึงประสงค์ได้*

สรุป *: ความชุกของการใช้สมุนไพรและผลิตภัณฑ์เสริมสุขภาพในสตรีวัยหมดประจำเดือนในโรงพยาบาลศรีนครินทร์ คือ 63% แต่ผู้เข้าร่วมวิจัยส่วนมาก (72 %) ไม่เคยมีแพทย์ซักประวัติเรื่องการใช้สมุนไพรและผลิตภัณฑ์เสริมสุขภาพของตน ดังนั้นควรมีการให้ความรู้และคำแนะนำแก่ผู้ป่วยเกี่ยวกับผลข้างเคียงไม่พึงประสงค์ที่อาจเกิดขึ้นได้ และแพทย์ควรซักประวัติการใช้สมุนไพรและผลิตภัณฑ์เสริมสุขภาพในผู้ป่วยทุกราย*