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**DOCTORAL THESIS** 

### **Choosing Between Mainstream and Complementary Treatments in Menopause : the** Role of Media, Advertising and Women's Perceptions

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FACULTY OF HEALTH SCIENCES & MEDICINE



Thesis submitted in total fulfilment of the requirements of the degree of Masters by Research: Submitted March 2013

## Choosing between mainstream and complementary treatments in menopause: The role of media, advertising and women's perceptions

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#### Abstract:

The general purpose of this study was to gain a deeper understanding of how women make choices for complementary or mainstream medicines. The author has extensive experience in Fiji and noticed an observed trend of more Australian citizens choosing complementary and alternative medicine (CAM) as a form of medical treatment compared with a decline in CAM use by Fijian citizens. This study investigates the media-related context of this observed trend, as well as women's personal choices when making decisions about treatments for menopause. Women are the most frequent users of CAM and symptoms presented during the perimenopausal years are often a reason to seek "natural remedies," such as CAM treatment.

The study has two components. First, media messages were analysed and deconstructed to see how health stories were being framed in leading media outlets that target women. A comparison of what was being promoted to Australian citizens compared to Fijian citizens, by means of content analysis techniques, is discussed. The second part of this study consisted of 26 semi-structured interviews with women aged 45-55 years in both countries to determine how they justify choosing a particular medical treatment—allopathic or CAM for symptoms of menopause. Interviewees were also presented with advertisements for menopause treatment and were asked as to how they would select a particular treatment. Interviews were analysed using a thematic qualitative analysis. The Human Research Ethics Committee of Bond University approved the study (RO-1111).

The content analysis showed that media in the two countries seem to display opposing views on the desirability for people to use CAM. From the interviews we learned that women take notice of the messages in advertisements and that their choices seem to be consistent with the local media opinions on CAM. Although most interviewees grew up using a particular type of health care, they were more likely to choose the type of care being promoted in their mainstream media. This study's results are consistent with other media research, which indicates media can be a powerful tool to shape people's health decisions, and/or that prevailing societal opinions dictate what the media write.

This study shows that the way media portray both medical treatments (allopathic and CAM) can contribute to choices individuals make. Therefore, it is imperative that media provide accurate representations of the evidence so that consumers can make a well-informed decision

based on reliable data. This study supports media literacy programs to help consumers develop skills to critically appraise and interpret media messages. Likewise, media producers need to be informed on how to produce media messages that minimise potential harm to the audience. The use of advisory boards for all medical reporting in media could ensure set guidelines for producers to follow.

#### **Declaration:**

"This thesis is submitted to Bond University in fulfilment of the requirements of the degree of Masers by Research. This thesis represents my own original work towards this research degree and contains no material which has been previously submitted for a degree or diploma at this University or any other institution, except where due acknowledgement is made."

Signature Mindy Jo Hegg Date: 3-22-13

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#### **Background and Rational**

#### Justification of Research

My first interest in researching complementary and alternative medicine (CAM) began during my study abroad trip to Fiji in 2008. I did a semester abroad and stayed in the capital city, Suva, for nearly eight months. Before leaving for my travels, I was required to do background research on the daily life of Fijians and other history involving the country. From this research, I got the impression that the majority of Fijians were living in villages with limited medical care—that nearly all citizens were using traditional medicine (CAM).

When I got to Fiji, I realized the research I had read was either old or inaccurate. Many people were living in well-established cities, which had advanced medical facilities. Some of the doctors were American, Australian, and from other parts of the developed world. CAM use was talked about very little where I was located and the locals who I befriended went to allopathic doctors for their medical concerns. Therefore, I started to question how I had such a wrong impression of Fiji or whether there was a recent change in medical care choices. I also began working for a media company in Fiji and found direct-to-consumer (DTC) advertising for all medical treatments were recently permitted.

Additionally, when I was travelling around the world, I noticed different cultures with significant differences in the way people felt about CAM. For example, where I grew up in Wisconsin (in the United States), the general feeling I got from people was that CAM was useless and was perceived as being used by "strange" people. There was not much discussion about it on television or in any print media, although advertising for CAM is permitted.

In contrast, when I moved to Australia in 2009, I found numerous magazine and newspaper articles discussing the positives of CAM. I also talked with many people who used CAM to treat their health concerns. This is when I started to question why there was such a difference in beliefs of people I meet in Australia compared to Wisconsin.

I started to do some research of my own to see whether there was any academic discussion about this topic. With my background degree in media studies, I was steered in the direction of looking into media as a factor. I found very limited information about the way CAM is presented in mass media and felt further examination was necessary.

This is why I decided to explore Fijian and Australian health articles targeted at women to determine whether the mass media could be a factor that influenced how people view CAM treatment options. I felt this was important research because other studies have shown people model and compare themselves to words and images in media as well as gain attitudes and create representations of reality through them. As a result, if media are consistently promoting one medical service over another, people might be more inclined to use that particular treatment. Therefore, I felt this research was needed to determine if media played a factor in medical treatment choices so there is a better understanding of whether policies regarding media articles should be further examined.

#### **I. Introduction**

Complementary and alternative medicine (CAM) use is becoming increasingly popular throughout the world especially for health issues where mainstream medicine does not have a clear answer; for example, cancer patients, people with migraines, children diagnosed with Attention Deficit/Hyperactivity Disorder, and women experiencing menopause have looked at CAM to help with their symptoms (NCCAM 2008). Although research indicates changes in use in different countries, little research has been done to determine the reason for the change from the perspective of the media and how women perceive media messages.

Some people use the media as their way to learn about health (Renita & Wu 2009). As Lewith (2005) stated, "what is advertised and promoted in media outlets will have a direct impact on the personal health information people use to guide their behaviours" (p. 401). Additionally, Bonevski et al. (2008), a team of leading researchers from the University of Newcastle in Australia stated, "despite the substantial growth in the use of CAM, very little is known about how the media reports on it" (p. 3). Bonevski et al. (2008) go further to say "considering the substantial evidence of a link between health news reports and health behaviour, it is vital that the information the media provides is accurate, unbiased and complete" (Boneski et al. 2008, p. 3). This highlights the potential influence of media on people's health behaviours. Since media articles play a large role in guiding consumer behaviour, CAM and allopathic articles are worth exploring to determine what information they are providing to readers regarding medical treatment.

Advertising for health related topics is a bit more controversial compared to other marketed products and what can be advertised depends on the regulations within a country. Depending on the type of regulation, it has potential to either promote or degrade a particular product or treatment. This study qualitatively explored patterns of media and CAM usage through the process of viewing two countries with different advertising regulations by looking at the media provided in each country, and then assessing the information on the statistics of CAM use in each country.

For this study, two countries were chosen which have seen opposite changes in CAM use and also have different advertising regulations regarding prescription medicines (CAM is not considered a prescription medicine in either Fiji or Australia) (Therapeutic Goods

Administration 2009; Women's Association for Natural Medicinal Therapy 1993). For example, there has been an increase in CAM use throughout the Australian population, but a decline in Fiji. In 1993, research showed nearly 46% of the Australian population were CAM users; when the same study was conducted in 2007, nearly 60% of the Australia population were CAM users (Xue et al. 2007). In contrast, in 1990, 78% of Fijians used CAM as their primary health care (Lewith 2005). In a 2004 study, 60% of Fijians used CAM as their primary health care option (Lewith 2005). Australia only allows advertisements of non-prescription medicines, including CAM, while Fiji allows all CAM and allopathic medicines to be advertised directly to consumers.

Due to the fact these countries have seen a considerable change in their CAM usages, it was significant to explore their media portrayals.

#### **II. Literature Review**

This literature review examines research relating to the effects of media on health care choices and focuses on the changes of CAM usage. Past literature was examined and analysed to present a summary of recurring themes. The databases used in this study for medical research were Cochrane Reviews, PubMed, National Centre for Complementary and Alternative Medicine, MeSH and BioMed. For research regarding media studies, EBSCOhost and CIOS were used. Keywords used to find information for this literature review were CAM, allopathic, menopause, prescription drug advertising regulations, CAM regulations, Health Communication and medicine use, medicine in media, and DTC advertising.

First, the definition of CAM is reviewed and the way the study will use the terminology is given. Second, the history of studying Health Communication is presented. Third, the agenda setting theory, which is used to guide this research, is examined. Fourth, the comparison of CAM use in Fiji and Australia is analysed; including the history of media, health beliefs, health care system, statistics of users, as well as drug and advertising regulations. Finally, a health condition where CAM is regularly used, menopause, is examined regarding symptoms and treatments.

#### a. Complementary and Alternative Medicine (CAM) Defined

CAM is often referred to, but there are many definitions of what constitutes CAM. According to the National Centre for Complementary and Alternative Medicine [NCCAM] (2007), "currently, there is no internationally agreed upon CAM definition and classifications of CAM therapies/modalities, thus making meaningful comparison of the findings of different studies impossible" (p. 2). It is well recognised that one size does not fit all, as different countries with different cultural backgrounds would have different ideas of CAM use. Thus, the CAM definition and classification has been developed within individual cultural contexts.

Many times the phrase CAM is used if a procedure is not consistent with the Western model of medicine. As Ottariano (2006) points out, "the very terms 'complementary' and 'alternative' are terms of exclusion (from a scientifically based mainstream), or at least imply a lesser status relative to an accepted mainstream (from the point of view of that mainstream) (p.

19)." Therefore, it is important when conducting CAM studies to consider what other societies might use to refer to CAM modalities and to be aware that what one country considers CAM might be another society's "mainstream" medicine.

Past researchers have used the definition developed by the United States' NCCAM as a guide in their studies. However, it was found in Australian studies that the definition suitable for American's did not provide meaningful details for all survey participants. As a result, Australian researchers identified a total of seven forms of CAM therapies, which are now used for guidelines during most research that represent a larger portion of cultures around the world. Herbal medicines, Chinese medicine, chiropractic, acupuncture, massage therapy, biofeedback, and homeopathy are used to classify CAM treatment (CAM Research Methodology Conference 1995).

Included in these seven forms of therapies is traditional medicine. Traditional medicine (also known as indigenous or folk medicine) comprises "knowledge systems that developed over generations within various societies" (WHO 2008). The World Health Organization (WHO) 2008 defines traditional medicine as:

"The health practices, approaches, knowledge and beliefs incorporating plant, animal and mineral-based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination to treat, diagnose and prevent illnesses or maintain well-being."

When traditional medicine is adopted outside of it's societal origin, it is often referred to as CAM (WHO 2008).

For this study, these seven forms of therapy (including traditional/folk medicine) will form the boundaries of what is meant by the term CAM. This definition eliminates the large change in statistics on CAM use when vitamins and supplements are included. Population-based surveys throughout Australia have identified that nearly 57% of the Australian population annually uses vitamins and supplements (Lorenc et al. 2009). Also, there is divergence as to whether vitamins and supplements are considered CAM treatment; therefore, by eliminating

them from the study, it will allow statistics used in other studies to be relevant, as well as ignoring the conflict over what CAM should include.

In general, complementary medicine is the part of the health sector that relies primarily upon "holistic, homoeopathic, traditional or natural therapies rather than an allopathic approach to medicine which characterises western or orthodox medicine" (Weir 2007, p. 8). CAM does not try to counteract diseases, but instead, tries to "stimulate a healing response" (Weir 2007, p. 7). Rather than focusing on the disease state itself, the practitioner evaluates what imbalance in the body may be contributing to ill health. The task of the practitioner is to "restore balance and equilibrium to the body" (p. 8).

As stated earlier, the statistics of CAM use have been changing. One concept to consider is what is contributing to this change. A good place to start is the communication people are exposed to about health treatments.

#### b. Health Communication

Communication is a process of transferring information from one individual or institution to another (Kreps 2008). It occurs in a variety of contexts (for example, school, home, and work); through a variety of channels (for example, interpersonal, small group, organisational, community, and mass media) with a variety of messages; and for a variety of reasons.

Communication is also an area of study. One area in communication study is Health Communication. Health Communication "encompasses the study and use of communication strategies to inform and influence individual and community decisions that enhance health" (Rudd & Keller 2009, p. 242). It also includes the construction of public health messages and campaigns and the images of health in the mass media. In short, Health Communication is a look at how people are influenced about their health behaviours through the communication they receive.

The delivery of health messages through public education campaigns seeks to "change the social climate to encourage healthy behaviours, create awareness, change attitudes, and motivate individuals to adopt recommended behaviours" (Peddecord et al. 2008, p. 602). Campaigns traditionally have relied on mass communication (such as public service announcements on billboards, radio, and television) and educational messages in printed materials (such as newspapers and magazines) to deliver health messages. Recently, in certain countries, there has been "increased sophistication of marketing and sales techniques, such as DTC advertising of prescription and non-prescription drugs" (Hollin 2005).

With increased sophistication in drug advertisements, and having health messages directed at people to adopt certain behaviours, this could increase demand for certain health services and decrease demand for other health services (Hollin 2005; Rudd & Keller 2009). For example, if health promotion in a certain culture endorses allopathic treatment, there might be a hesitation in using CAM. On the other hand, if another culture promotes CAM, people might be tentative in using allopathic medicine.

Since it is a central role of Health Communication to produce or reinforce attitudes, it makes it relevant to consider how it affects people's choice of treatment options.

#### c. Agenda Setting

Agenda setting is the theory that the mass media has a large influence on audiences by choosing what stories are considered newsworthy and how much attention and space to give to them (Renita & Wu 2009). News outlets act as gatekeepers of information and make choices about what to report and what not to report. What the public know and care about at any given time is mostly a by-product of media-gate keeping (McCombs & Shaw 1972).

Walter Lippmann, a prominent American journalist and scholar from Harvard University, was the first to analyse the impact of the media on people's perceptions. In 1922, Lippmann described in *Public Opinion* that, "people did not respond directly to events in the real world but instead lived in a pseudo-environment composed of 'the pictures in our heads'" (p. 29). The media would play an important part in the furnishing of these pictures and shaping of this pseudo-environment—highlighting the influence of media messages on human behaviour.

McCombs and Shaw (1972) made this idea clearer when they said, "Here may lie the most important effect of mass communication, its ability to mentally order and organise our world for us" (p. 178). In short, "the mass media may not be successful in telling us what to think, but they are stunningly successful in telling us what to think about" (p.179). Media, or in other words, popular culture, are capable of impacting values because their messages reach

billions of people and are a central vehicle of ideology (Agger 1991). Media messages are imposed from the top down and consumers of popular culture are diverted from serious world issues (Lacroix 2004). Popular culture has been directly blamed for the "decline of public intelligence and the weakening of the collective moral fibre" (Agger 1991, p. 26). Therefore, media are shown to distract people and can be used as a powerful tool to shape people's decisions.

In addition, advertising instructs us not only on which products fulfil our needs, but also creates the need for these products (Lacroix 2004). People learn how to do things through media but do not learn how to think (Agger 1991). As Lacroix (2004) explains "media is a teaching machine and producer of culture and from a young age, people are taught to consume ideas" (p. 216). People's decisions are shaped by media messages because people model and compare themselves to the words and images presented. They also gain attitudes and create representations of reality through them.

The influence this has on one's decisions is also explained through the Symbolic Convergence Theory developed by Bormann (1972); "media content can facilitate social convergence by spreading and reinforcing symbolic themes that in turn create social ideology" (p. 398). Therefore, after repeated exposure to consistent themes as they are produced across publications, individuals arrive at shared understandings of reality (Bormann 1972). What media are communicating to us will, therefore, affect our opinions and what we find as popular and/or right.

Overall, agenda setting's main assumption is that the mass media can transfer issues of importance from their agendas to the public agendas—a cause-and-effect relationship between the media and the public (Becker & McCombs 1978). The media agenda are issues discussed in the media, such as newspapers, television, and radio. Public agenda are issues discussed and personally relevant to members of the public. Putting the idea of agenda setting back into the concept of Health Communication, it shows how media messages might be influential in choosing a particular health care option. This goes back to the example that if one culture has news outlets that promote allopathic treatments, there might be a hesitation in using CAM, and vice-versa. Therefore, the way people think and believe about medications might be influenced by the news gatekeepers in their society.

*d. Comparing Fiji and Australia: Media introduction, health beliefs, health care system, statistics of use, and drug and advertisement regulations* 

Fiji

#### *i.* Media Introduction

Fiji has only recently been introduced to media and studies show it has had affects on the citizens (Becker 1995; Sundar 2004). The Vice Chancellor of the University of the South Pacific, Konai Thaman (2006), notes that the globalisation of media has not necessarily benefited indigenous people. Turning to Fiji, she highlighted the lack of TV programming in the indigenous Fijian language as an example of the "marginalisation of indigenous cultures and peoples in Oceania by the mass media" (p. 134). The new media devices are undermining traditional culture. This makes it relevant to view Fijian media through the lens of the agenda setting theory.

As Sundar (2004) said, "Pacific nations are amongst the last places on earth to have received television and Internet access" (p. 108). The radio was introduced in Fiji in 1935 but was not used regularly until 1954. The first televised program occurred in 1991 with the airing of the World Rugby Cup competition. The Internet was introduced into urban areas beginning in 1996 but is still not available to many citizens due to coverage and cost. There are currently three leading newspapers, and few periodicals and magazines (Sundar 2004). Compared to media in Western cultures, there is a limited selection of programs and articles available. Fiji's exposure to media is, therefore, new and limited.

Fiji has also had apprehension about big business and government ownership of media said to have relations to Western corporations (Singh 2008). Singh (2008) argues that there is concern about media freedom, media ownership, cross media ownership, and media consolidation.

As a study done by Becker (1995) demonstrates, values and beliefs have indeed been confronted; television programs have had a huge impact on adolescent girls in Fiji. The study showed, "explicit links in changing attitudes about diet, weight loss and aesthetic ideals in the peer environment to Western media imagery" (p. 509). Fiji was selected as a study site because of its extremely low prevalence of eating disorders. There was only one reported case of anorexia

by the mid-1990s (Becker 1995). This study showed that after television exposure in their community in 1995, Fijian adolescent girls reported a large increase of self-induced vomiting to lose weight (Becker 1995). Becker (1995) stated, "the impact of television appears especially profound, given the longstanding cultural traditions that previously had appeared protected against dieting, purging and body dissatisfaction in Fiji" (p. 510).

This study shows how media messages have recently become influential in the Fijian culture. It also highlights that many traditions are "likely to be lost as newer generations are breed off the media" (Thaman 2006, p. 434). One Fijian tradition, which has shown a decline after the introduction of media, is the use of CAM.

#### *ii.* Health Beliefs

In Fiji, CAM is more often referred to as traditional medicine and for centuries it has been used as a primary health care option. Early Fijians had an intimate and dynamic relationship with the natural environment that provided them with many medicinal needs (Farell & Murphy 1978). "The environment was an integral part of physical, social, cultural, and spiritual life; indeed it was regarded as the source of life" (p. 38). The root, bark, leaves, and shoots of certain plants were and are still used for all types of ailments. Both the traditional medicine of the iTaukei (indigenous population) and that of Indo-Fijians (who brought with them their own medicinal plants and medicinal plant knowledge) are still practiced (Ministry of Health [Fiji] 2007).

The preparation of medicine is considered a special gift amongst Fijians (Parham 1972). Some medicine is a collection of plants while others are from a single source. Medicines are either consumed directly or are boiled in solutions, which are then consumed. Other medicine may only be applied externally—to be used to massage or rub the body. Some of the medicines are offered with specific conditions such as, "abstention from certain foods and activities" (Nayacakalou 1978, p. 15). Most of the knowledge of these medicinal plants is passed down family lines—some plants are commonly used while others are not publicly known (Parham 1972).

Many Fijians also believe that specially blessed individuals possess healing power. They believe certain people have a gift that is associated with magical powers that is related to the

gods and ancestral spirits. These blessed individuals are referred to as medicine men and women (France 1996).

It has been recorded that indigenous healers have cured people who could not be treated in hospitals. In fact, "some Fiji sport personalities have sought treatment for broken bones from traditional masseurs" (Farell & Murphy 1978, p. 34). Some couples also testify to the success of "traditional bath," which has allowed people to bear children (p. 33). Fijians have used and trusted medicinal plants and traditional healers for centuries.

#### iii. Health Care System

Fiji gained independence from Great Britian in 1970 and during colonial rule, as previously mentioned, most citizens of the country relied on traditional medicine (Ministry of Health [Fiji] 2007). There was a hospital in Suva but only residents who lived in this particular city would typically receive care. Many practitioners also continued to practice traditional medicine.

Then in 1977, the history of health care saw a dramatic change. Primary health care was introduced after a series of South Pacific regional seminars involving the World Health Organization (WHO). Fiji embraced primary health care and signed up to the "Declaration of Health for all" by the year 2000. Fiji then became, and remains, the only nation in the pacific islands to have a WHO centre established (Ministry of Health [Fiji] 2007).

Currently, basic allopathic health care is provided to all residents (Ministry of Information [Fiji] 2009). People can receive care from village health workers, nursing stations, health centres, or hospitals (unspecialised) free of charge. This is possible because "health care services are provided by a tax-financed public health system" (p. 3). There are also specialty doctors and hospitals available that are not government funded. These locations expect immediate cash payment for health services and only a small portion of the population can afford it (Ministry of Information [Fiji] 2009). To help with specialised doctors, insurance can be bought from private insurance companies (Ali 2010).

During the time primary health care was being established, community pharmacies were another service introduced. The aim was to bring medicines to the communities (Ministry of Health [Fiji] 2007). Prior to this, drugs and medicines were available in commercial pharmacies, but only in main cities and towns. The community pharmacies were placed in the government health centres and hospitals that then reached numerous villages and other isolated areas (United Nations Population Fund 2004).

After the community pharmacies were set up, people who had never been exposed to prescription drugs were now receiving them for all types of ailments. There is currently a range of drugs listed on the "Essential Medicines List" which are available for free (Ministry of Health [Fiji] 2007). Traditional medicine, on the other hand, is not presently available from service outlets of government; it remains a community, personal, or family based service. This makes it more challenging to access, especially in the cities, and is not always ensured to be free of charge. Fijians went from having readily available CAM options to having an abundant supply of allopathic options.

#### *iv.* Statistics of Use

A study by Arno (1995) found that between 60% and 80% of people surveyed still used some sort of traditional medicine in their health care routine. This is a significant decline when less than half a century ago, everyone in Fiji was using CAM medicines and only CAM (Arno 1995).

According to a study in 1993 by the Women's Association for Natural Medicinal Therapy, villagers still find traditional medicine to be more efficient and cost effective, but have begun to also have great faith in allopathic medicine. The study also found that people, including practitioners of allopathic medicine, "use traditional medicine, but hesitate to call it such because traditional medicine is now associated with witchcraft" (p. 122).

#### v. Drug Regulations

There has never been and there currently is no national policy, law, regulation or national programme for CAM in Fiji. This includes no regulatory requirements for the manufacturing of herbal medicines. The only safety requirement is that "no prior harmful effect should be identified with the drug." Little to no enforcement is provided (Ministry of Health [Fiji] 2007, p.14). There are also no restrictions on the sale of herbal products, and herbal medicines are not

sold with any claims. There is, however, a CAM national office, which is administered under the Ministry of Health. This office does not have an expert committee or research institute for the study of CAM; though it is in the process of establishing a national policy and a national programme for CAM (Ministry of Health [Fiji] 2007).

#### vi. Advertising Regulations

Prior to the military overthrow in 2006, it was against media regulation to advertise CAM or allopathic medicine. However, many stories slipped through and were printed due to lack of knowledge of the media regulation as well as lack of enforcement (Ministry of Information [Fiji] 2009). Since April 2009, Fiji's media has been under censorship when the "public emergency regulations" came into place (Ministry of Health [Fiji] 2007, p. 6). Instituted by current Prime Minister, Voreqe Bainimarama, police and military workers have now been put in newsrooms to enforce government censorship and they have the power to veto any story (Fiji Media Council 2010). CAM and allopathic advertising is now considered lawful but is still under the discretion of the government (Singh 2008).

#### Australia

Unlike Fiji, Australia prohibits prescription allopathic advertising and has seen an increase in CAM usage.

#### *i. Media Introduction*

Australia's introduction to media is not as recent as in Fiji. The first newspapers, Sydney Gazette and New South Wales Advertiser, were printed in March 1803 (Sprague 1961). The first radio broadcasting happened the 13<sup>th</sup> of November 1923. And the first media broadcast on television occurred in September 1956 (Henry 1964).

#### *ii. Health Beliefs*

As with most native civilizations, Indigenous Australian's understood the power of plants found in their environment. This allowed them to thrive in often challenging environments (McCabe 2005). Until the 19<sup>th</sup> Century, medical practitioners throughout Australia were more like today's naturopaths—paying close attention to patient's lifestyle. They would then suggest treatments such as "changes in diet, environment, and sometimes prescribe herbal remedies" (McCabe 2005, p. 29).

The use of CAM decreased in Australia during the 20<sup>th</sup> Century after medical practitioners became more focused on using pharmaceutical drugs such as penicillin. Although CAM started to be outdated, many patients continued to "seek them out," especially when conventional medicine did not seem to have a clear answer (McCabe 2005).

#### iii. Health Care System

The current national health insurance system in Australia, Medicare, was established in 1984 and provides assistance for hospital and out-of-hospital medical treatments. It was established under the assumption that "all Australians should contribute to the cost of health care according to their ability to pay" (Health Direct Australia 2009, p. 3). Therefore, it has been financed through income tax and an "income-related Medicare levy" (p. 54). It allows free treatment for public patients in a public hospital. There is also a Pharmaceutical Benefits Scheme, which subsidises prescription medicine. This ensures that all Australians "have affordable and reliable access to a wide range of necessary medicines" (Medicare Australia 2010, p. 2).

There are no government subsidies for CAM treatments—except acupuncture, if a doctor performs it during a consultation (Medicare Australia 2010). The majority of Australians who choose CAM therapies pay for it themselves, either directly, or through their private health fund. Studies show that if people have a choice in treatment options through their insurance plans, they tend to utilise CAM (Therapeutic Goods Administration 2009). For example, a large portion of insured cancer patients will use alternative providers when given the choice (MacLennan et al. 2002).

#### *iv.* Statistics of Use

No matter what definition is used to constitute CAM, there is a continuous increase in use throughout Australia and people use CAM for numerous reasons. Most research suggests that people choose CAM in Australia mainly for general wellbeing, and there is a high use for people with conditions such as cancer, high blood pressure and allergies (Xue et al. 2007).

CAM users were also more likely to have a higher income, and a higher educational level; they were more likely to be employed, have a higher alcohol intake, and to be of normal weight compared to non-users (Bishop & Lewith 2010; Cincotta et al. 2005; Xue et al. 2007). Additionally, non-urban residents, people with more symptoms and illnesses, and people who are higher users of conventional health services are more likely to use CAM, but do so in parallel with conventional health services (Peddecord et al. 2008).

In Australia, women are the highest users of CAM. More specifically, the highest users were peri-menopausal women over 35 years of age. Women aged 45-50 were more likely to consult a CAM practitioner in the previous year (28%), followed by women aged 18-23 (19%), and less likely by women aged 70-75 (15%) (Adams et al. 2003; MacLennan et al. 2006). Research seems to suggest that younger women tend to use their personal judgment with CAM, and middle-aged women tend to seek advice from practitioners (Adams et al. 2003).

The use of CAM has increased in older women as the number of symptoms increased and as physical health deteriorated. Therefore, the use of CAM amongst older women tends to be influenced by poor physical health (Manheimer & Berman 2008).

#### v. Drug Regulations

In 1989 an expert committee was established—the Complementary Medicines Evaluation Committee. This provided "scientific and policy advice relating to controls on the supply and use of CAM" (Australian Medical Association 2002, p. 14). Specifically, it provided information on the safety and quality of products as well as "efficacy relating to the claims made for products" (p. 14). Enforcement and the role of the committee were limited (Rosenthal et al. 2002).

In 1999, a national policy on CAM was established. According to the new policy, to get CAM approved, it must go through "identity tests" (to make sure it is the appropriate substance), and pass the "limit test" to make sure it has little to no contaminants or residue. However, this is not legally binding on manufacturers because CAM does not have to be approved before being

sold (Australian Medical Association 2002). Currently there are 1500 herbal medicines listed in Australia; none are yet included on the Pharmaceutical Benefits Scheme (Bratman 2007).

Further, the national policy does not recognise the role of CAM in the health care system (Australian Medical Association 2002). As a result, CAM is not managed to the same extent as allopathic medicines with respect to safety and efficacy.

Other control systems include "post market reviews, evaluation of toxicological data on new proposed herbal substances and history of use data" (Morris & Avorn 2003, p. 5). The post marketing surveillance system has also included adverse effect monitoring since 1970 (Morris & Avorn 2003). Although regulation standards have increased, CAM is still regulated as over-thecounter medication. It can be sold over-the-counter in pharmacies, in special outlets, by licensed practitioners and without restriction (Mintzes & Kazanjian 2002). Therefore, people are allowed to buy CAM, but do not necessarily have a trained health professional available to provide advice on the products.

All medicines are entered into the Australian Register of Therapeutic Goods (ARTG). Medicines will receive either an L or R on the label.

"This labelling is required for the lawful supply of a therapeutic goods in Australia...The L refers to listed medicines (including most if not all complementary medicines and overthe-counter) and the R to registered medicines (primarily prescription medicines)"

(Therapeutic Goods Administration 2009).

Medicines without these labels have not been evaluated for the "quality, safety or efficacy of the product" (Therapeutic Goods Administration 2009).

#### vi. Advertising Regulation

Currently in Australia, according to the jurisdiction of Medicines Australia ("a selfregulatory industry body") and the Therapeutic Goods Advertising Code, it is prohibited to advertise prescription drugs DTC. The two codes allow for "patient education, including advertising or provision of information on medical conditions and the broad range of treatments that may be prescribed by doctors" (Hall et al. 2009, p. 626). The advertisements, however, should not encourage a particular prescription, product or treatment. Instead, they should make a

statement to consumers to seek further information about the condition or potential treatments available (Hall et al. 2009).

Prior approval of advertisements is not required; however, there is a monitoring committee, and some companies may be required to "submit promotion material for review at various times" (Hall et al. 2009, p. 627). The advertising codes also clarify that the education should be: current, accurate and balanced (Hall et al. 2009, p. 626).

Although advertisements for prescription medicine are prohibited in media outlets to the public, it is not outlawed to advertise CAM and non-prescription therapies. Those who advertise CAM therapies are bound by the Therapeutic Goods Act 1989, the Trade Practices Act 1974 and other relevant laws, but are still permitted (Therapeutic Goods Administration 2009). Advertisements, for therapeutic goods, include "any statement, pictorial representation or design, however made, that is intended, whether directly or indirectly, to promote the use of supply of the goods" (Therapeutic Goods Administration 2009).

Section 22(5) of the act specifies that "advertising of a therapeutic good can only refer to the indications which are included in the Australian Register of Therapeutic Goods for that specific good" (Therapeutic Goods Administration 2009, p. 346). Therefore, CAM advertising is only allowed for products that have been listed by the TGA. Additionally, there has been an attempt to provide post-marketing surveillance, similar to the level in place for pharmaceuticals, but there is currently no active surveillance (Pharmaceutical Society of Australia 2007). In general, there are regulatory bodies in place; however, CAM advertisements are still permitted with limited enforcement.

#### e. Menopause

One medical issue that has sparked interest in CAM treatment is menopause. In fact, a 1997 study found menopause was in the top 10 conditions treated with CAM (Pelletier 2000).

Women experience menopause before the end of their natural lifespan. Menopause is the "permanent termination of reproductive fertility" where there is a permanent stopping of monthly menstruation (North American Menopause Society [NAMS] 2007). During this time, the ovaries start producing lower levels of oestrogen and progesterone. Typically this occurs in women who are in their mid-forties to mid-fifties (NAMS 2007; National Institute on Aging [NIA] 2007).

There are many common symptoms involved with menopause. Some of these symptoms include menstrual irregularities, hot flushes, night sweats, mood swings, headaches, insomnia, vaginal dryness, urinary problems, weight gain, memory and cognitive changes, fatigue, as well as decreased libido. Other symptoms consist of aching joints and muscles, indigestion, hair loss, and dizziness (NAS 2007; NIA 2007; National Institute of Health [NIH] 2009).

There is not an ultimate cure or treatment for menopause symptoms. Some women do not need therapy, or they may choose not to take medications at all during their menopausal years. There are, however, a variety of treatments one can use to lessen bothersome symptoms if desired. Many prescription medications exist to prevent and control high cholesterol and bone loss, which can occur at menopause. Other therapies, such as hormone therapy and low-dose antidepressants are used to treat menopausal symptoms (especially hot flushes) (NIA 2007; NIH 2009).

Hormone replacement therapy (HRT) is considered to be the most effective treatment for menopausal symptoms—in relation to vaginal dryness, hot flushes and night sweats (Mayo Clinic 2010). HRT consists of estrogens or a combination of estrogens and progesterone (progestin). Low doses of these hormones are given to replace what the body is producing less of (Mayo Clinic 2010). Long-term studies of women receiving combined hormone therapy with both oestrogen and progesterone (Women's Health Initiative trial) were halted when it was revealed that these women had an increased risk for heart attack, stroke, and breast cancer when compared with women who did not receive HRT (NIH 2009; Perker 2003). Recent studies have also shown a slight increase in the risk of developing dementia (NIH 2009).

Women have found that a similar therapy, ERT (oestrogen replacement therapy), has reduced their frequency and severity of hot flushes (Mayo Clinic 2010). It can also reduce the risk of osteoporosis and colon cancer (NIH 2009). However, studies have also shown that around 10 percent of women who use ERT have minor side effects (Laine 2002). These include weight gain, increase in blood pressure, headaches, nausea, and more. Therefore, women choosing to partake in ERT treatment are generally prescribed a low dose and it is prescribed for the shortest time necessary (Laine 2002; NIH 2009). The side effects of the traditional HRT and ERT, have stirred a lot of negative publicity. However, many women find they help improve their quality of life—reducing hot flushes, night sweats and vaginal dryness.

Other women continue to search for another method—often looking for a natural hormone replacement. Natural alternatives that many women choose are CAM treatment options, assuming that CAM treatment options are natural, therefore, safe and effective (Bortoff 1991; House of Lords 2000; Lewith 2005). However, some CAM treatments are not tested properly and have been associated with severe side affects (Lewith 2005). Many women still take the risk and regularly use CAM products for their menopause symptoms. One of the leading CAM treatments for menopause is black cohosh. Black cohosh, a member of the buttercup family, is a plant native to North America. Some of the common names are black snakeroot, macrotys, bugbane, bugwort, rattleroot, and rattleweed. It was used in Native American medicine and was a home remedy in 19th-century America. It was mainly used for arthritis and muscle pain (Brinchkman 2002).

Today, black cohosh is considered a phytoestrogen that is used primarily as a nutritional supplement for hot flushes, mood swings, night sweats, vaginal dryness and other symptoms that can occur during menopause. The parts of the plant used medicinally are the fresh or dried roots and underground stems—these are available in health food stores, some pharmacies and online. It comes in tea, capsule, tablet or liquid extract forms with varying doses from 20 mg to 60 mg. It is still unknown how black cohosh works. It was once thought to have oestrogen-like activity, but there is growing evidence that it does not (Brinchkman 2002; NCCAM 2007). Some of the side effects of black cohosh may include indigestion, weight gain, low blood pressure, nausea, and headache. There has also been a link between the drug and life threatening liver damage. There have been several reports of hepatitis (inflammation of the liver), as well as liver failure, in women who were taking black cohosh (Mahady 2008; Brinchkman 2002). However, it is not known if black cohosh was responsible for these problems. Although these cases are very rare and the evidence is not definitive, scientists are concerned about the possible effects of black cohosh on the liver.

Health Canada advised consumers of the link between black cohosh and liver damage in 2006 (Mahady 2008; Ottariano 2006). In 2007, the United States Pharmacopeia proposed that black cohosh product labels contain a cautionary statement. However, The American Botanical Council has countered that there is insufficient evidence to warrant the proposed caution (Mahady 2008). Although studies are inconclusive, Australia has added a warning to the label of all products containing black cohosh, stating that it "may cause harm to the liver in some

individuals and should not be used without medical supervision" (Ottariano 2006, p. 22). Most studies to date have been less than 6 months long, so the safety of long-term use is unknown. Most black cohosh materials are from plants growing in the wild. Therefore, one of the concerns regarding the safety is whether or not harmful materials from other plant sources are being unintentionally mixed in (Mahady 2008). The North American Menopause Society (2007) does support the short-term use of black cohosh for treating menopausal symptoms, for a period of up to six months, because of its "relatively low incidence of side effects when used short term" (p. 12). However, there have still been very few scientific studies done to establish the benefits and safety of this product. Without solid evidence, studies remain mixed on whether black cohosh effectively relieves menopausal symptoms.

Another leading CAM treatment for menopause is red clover. Red clover is a plant that is native to Europe and parts of Northwest Africa and Western Asia (Natural Standard Database 2013). Some of the common names are cow clover, meadow clover, and wild clover (Lethaby et al. 2007). It is said to have isoflavones that have been used as a remedy for menopausal symptoms including night sweats, mood swings and hot flushes (Lethaby et al. 2007).

For medicinal purposes, the flower is the most commonly used part (Natural Standard Database 2013). Red clover is available in many forms, including "capsules, teas, dried extracts, liquid extracts, tablets and ointments which are used for topical or external use" (Natural Standard Database 2013). Doses vary between 40-80 mg (Fugh-Berman & Kronenberg 2001).

Some of the side effects are vaginal bleeding, blood clots, liver damage, and headaches (Fugh-Berman & Kronenberg 2001; Lethaby et al. 2007). Red clover has also not been thoroughly tested. The safety of long-term use is unknown as there have been no long-term studies (over 12 months) conducted (Fugh-Berman & Kronenberg 2001). Without proper research, the benefits and safety of red clover cannot be verified.

#### **III. Research Questions**

#### a. Research Objective

Health Communication looks at how people learn their health attitudes through different communication techniques (Rudd & Keller 2009). Research on agenda setting continues to provide evidence that mass media play a role in shaping people's opinions—such as affecting and reinforcing attitudes (Lacroix 2004). CAM advertisements are an example where Health Communication and agenda setting could be a factor in who and how many people decide to use certain products. Therefore, this study expands upon the agenda setting and Health Communication literature by focusing on CAM media portrayals and examining how it could affect use.

Further, two countries, Fiji and Australia, have seen a change in CAM use. These two countries also have different medical advertising regulations; Fiji allows both CAM and prescription drug advertisements in their media, while Australia allows CAM but not prescription drug advertisements (Australia New Zealand Therapeutic Products Authority 2009; Fiji Media Council 2010). Fiji has had a decrease in CAM use over the years while Australia has seen an increase in CAM use. Thus, this research focuses on individuals who reside in countries, which have seen changes in CAM use, to determine if different advertising regulations might be a factor in the changes.

The research was narrowed by focusing on a health issue where CAM is used regularly, menopause. This also allowed the study to use a population who are the highest users of CAM— women. As a result, the following research questions were raised:

#### b. Research Questions

RQ 1: How are medical treatment options reported throughout Fiji and Australian's mainstream magazines?

RQ 2: How do women between the ages of 45-55 years make choices between mainstream and complementary treatments for menopausal symptoms?

### **IV. Method**

#### a. Description of Process

Data for this study was collected through a qualitative process using content analysis and semi-structured interviews. Qualitative methodology is considered to be the best methodology for this study, because it meets the descriptive nature of the research problems and gives insight into the interviewees' backgrounds. Eisner (1998) states that "qualitative experience depends on qualitative forms of inquiry—we learn to see, hear, and feel" (p.21). Since this study is about understanding what shapes CAM use, qualitative inquiry best fits in this framework.

The qualitative researcher studies "things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them" (Cottrell & McKenzie 2005, p. 18). The qualitative method is most acceptable because it will allow meanings to emerge from within the context and interviews in order to gain a deeper understanding of the themes present in a popular text and how this could affect women's treatment choices. Instead of having a predetermined category to discover, a qualitative method allowed for an open-ended research allowing the findings to surface throughout the study.

There are several variations of qualitative research. All variations aim to gather information on the "subjectivity of participants to elicit descriptions and meanings they have about phenomena," while also trying to "minimize suggestions of subjective interpretation by researchers" (Julie Hepworth, personal communication, July 12, 2013).

One technique used for analysing qualitative data is thematic analysis. This process can be understood from the two perspectives of "seeing" and "seeing as" (Boyatzis 1998). To see patterns in the data, the process started with a coding procedure. The coding procedure was done in an inductive approach as it used a starting point in the data. Boyatzis (1998) terms this concept as "swimming in the data).

The qualitative process can be understood from different steps of reflections and interpretations by using an inductive thematic analysis (Boyatzis 1998). The coding procedure in this process starts with reducing the raw information by written outlines of each unit of text (articles and interviews for this research). The text units are 'chunks' of information expressed by the articles and interviewees, which are interpreted in terms of what they explicitly or

implicitly say. The process of "seeing" starts by identifying themes. On a manifest level, descriptive themes can be found.

There are different ways of showing, interpreting and theorising qualitative data (Coffey & Atkinson 1996). One way can be to list themes. The themes can give support to highlight relations within a studied phenomenon. These relations can be understood as "patterns which emerge on a theoretical level" by combining ideas of other researchers with the findings (Boyatzis 1998). This is the level of seeing in thematic analysis.

This study used two qualitative thematic analyses addressing each research question independently. First, a content analysis was done to determine how the media could have an influence on readers' choices regarding medical treatment. This was done by using the agenda setting theory as a guide to analyse news gatekeepers in Fiji and Australia to determine what the mass media is promoting to their readers. As stated earlier, Fiji and Australia were chosen as countries of research due to their dramatic change in CAM usage as well as their difference in advertising regulations of prescription drugs.

The research also used semi-structured interviews to gain a deeper understanding of what women consider important when making a choice for their health conditions. This was done by discovering their framework of knowledge as well as a look into how they felt about different menopause treatment options. A look into how they view different medical products was recorded, as well as questioning where or whom they get their medical information from (see appendix a).

#### b. Content Analysis

Krippendorff (1974) defines content analysis as "a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use" (p. 156). Using content analysis, this research studied what Lasswell (as cited in Abernethy 2000) formulated as the core content analysis questions: "Who says what, to whom, why, to what extent and with what effect?" (p. 79). This allowed for a deeper look at agenda setting of media being promoted to Australian and Fijian citizens to determine if media might be causing a change in CAM use.

*i.* Text

The text in a content analysis is the data or media form being examined (Abernethy 2000). In this case, the text used for Australia and Fiji's analysis was magazines available both in print and online. The "Magazine of the Year" and the magazine voted "Best Woman's Magazine," were selected to analyse Australian media—*Australian Women's Weekly*, and *Women's Health and Fitness au*. For Fiji, the leading two magazines were selected—*Mai Life* and *Marama*. It is beneficial to look at the leading media sources in these two countries to decode health messages—as they might have a greater chance of influencing a larger number of readers.

*The Australian Women's Weekly* was chosen to analyse because it is Australia's highestcirculating magazine. As of 2008, between 490,000 and 530,000 copies were sold each month (Meade 2009). This publication was also named "Magazine of the Year" at the annual Magazine Publishers of Australia Awards (Australian Consolidated Press 2009).

*Women's Health and Fitness au* has been labelled the "Best Women's Magazine on the market today" by Australian Consolidated Press (2009). The magazine also claims to have the latest up-to-date expert health advice (Health Magazines Australia 2010). It was valuable to analyse a magazine said to be the best women's magazine with the latest health advice to see what it was presenting to the readers.

A variety of media forms have recently been introduced to the Fijian culture, including radio, print, television and Internet. However, there are a limited number of people who have access to these new forms of media, due to location and cost. Newspaper and magazines, on the other hand, reach a large portion of the population as they are circulated widely; one magazine is read by approximately 8-10 people (Robie 2008). Magazines are also a major vehicle through which media convey contemporary information and popular culture (Zabel 2007).

Additionally, the magazines, *Mai Life* and *Marama*, are located around the country; therefore, many people are likely to read them. The current circulation of these publications is over 55,000 (for *Mai Life*) and 31,000 (for *Marama*) in a population of under 900,000 (Robie

2008). Other media, such as television, have been studied to a greater extent, whereas magazines have been researched much less.

#### *ii. Text selection method*

Ten articles were chosen per text—two texts per country, making a total of 40 articles to be examined. To find articles in *Australian Women's Weekly*, the researcher went to the current online publication, on February 10, 2010, clicked on the diet and health tab and then went to the health news section. This narrowed the section in the magazine to health related articles. Finally, the first article was chosen followed by every consecutive article, until a total of 10 articles were collected. All articles were from 2009-2010.

For *Women's Health and Fitness au*, the researcher went to the online publication, On February 10, 2010 clicked on the health and beauty tab and then the popular topics section. Finally, due to the limited articles available, the first through the tenth article were chosen.

For *Mai Life* and *Marama*, a similar procedure was conducted. The researcher went to the online publication, on February 10, 2010, clicked on the search tab and typed health and beauty. Finally, due to the limited articles available, the first through the tenth article were chosen.

First, each article was analysed individually. The most widely presented health messages and themes were then determined. Next, each country's 20 articles were observed as a whole. A constant viewing of the images and health messages was done to gain an overall understanding of what themes regarding CAM and allopathic treatment options were presented. Finally, a comparison of the messages in each country was undertaken. This allowed the researcher to compare media reports of CAM and allopathic treatments between the countries and how this compared to the usage trends.

#### iii. Data Analysis

The agenda setting theory was used to examine news gatekeepers in Fiji and Australia to determine what the mass media is promoting to their readers. Agenda setting theory was chosen as it has proven to be a solid method to determine how media affects readers' discussions; however, has not been used in relation to choices in health care.

Agenda setting was also used since it targets media articles with a perception that it is "a teaching machine...people are taught to consume ideas" (Lacroix 2004, 216). Popular culture has been directly blamed for the "decline of public intelligence and the weakening of the collective moral fibre" (Agger 1991, p. 26). As Agger demonstrates, popular culture is reshaping our society, and media plays an important role in advertising the pop culture industry. With agenda setting as a theoretical paradigm a look at how media might influence people's decisions—specifically focusing on health care decisions was done.

The data was analysed thematically using a Constant Comparative Analysis with the agenda setting paradigm. As explained by Strauss and Corbin (1990), the purpose of this procedure is to make sense of the data collected by reducing the possible explanations to a small, but exhaustive set of themes. First, while analysing the media messages, comments that were generated which involved CAM or allopathic health care coverage was reported. Second, the statements were combined in order to create common labels. Third, the labels were combined until there were three categories per country. Finally, the two countries determined categories were compared and contrasted. To ensure consistency, this process was completed separately by three individuals—the researcher and two media experts from the University of the South Pacific—Imraz Iqbal Ali and Masada Vuinakadavu. Any differences were discussed as a group until a consensus was reached.

#### c. Interviews

The second method used in this study to address research question number two was semistructured interviews. The goal of using qualitative interviews for this project was to gain a deeper understanding of what women stated as their reasoning for choosing a particular treatment for their menopausal symptoms.

The interviews were semi-structured in nature. In other words, they involved a limited number of broad questions. Probing questions were then used to elicit what was "behind the answer"—questions were asked that probed the interviewee's responses.

There were 26 interviews conducted face-to-face with women from both countries—Fiji (13) and Australia (13). Ethical approval was obtained from Bond University's Human Research Ethics Committee (project approval number RO: 1111), before any interviews were conducted.

#### *i. Recruitment of women*

Fijian participants were recruited from all areas around the capital city, Suva, while participants in Australia were recruited from residents living in the Gold Coast area. Interviews were done in these areas only because it was easier to arrange mutually convenient locations to undertake the face-to-face interviews as the researcher was stationed in Suva and on the Gold Coast for a significant time period.

The inclusion criterion was that participants were women (whom where either selfreported menopausal or not) between the ages of 45-55 years. Interviews were conducted until the researcher stopped gaining new insights. In other words, data saturation determined how many interviews to conduct.

Media and anonymous pathways (such as posters) were used as the primary recruitment process for Fijian participants. Flyers were posted around Suva city; at local super markets, the University of the South Pacific and service stations. To get participants who do not have access to these outlets, and to get any remaining interviews, recruitment through friends and colleagues were used. After getting contact information, the potential participants were contacted by the researcher. There was no further consulting with friends or colleagues to ensure confidentiality; the researcher did not disclose participation to the contact.

Australian participants were recruited through a similar process. Flyers were posted around the Gold Coast area—at local super markets, Bond University, and service stations. Friends and colleagues were also used to recruit a diverse range of participants and ensure a maximum variety. Participants came from various backgrounds; some were wealthy, others poor, some were working-women (in a variety of job positions); while others were stay at home mums. Some were Fijian others are Indo-Fijian; some were Australian while others were immigrants. Some of them were mothers; others had no children. Some were married; others were single. In both cities, participants who were well known to the researcher were excluded. In cases where the researcher had doubt about the level of comprehension, an interpreter was invited. The aims of the interview were discussed with the interpreter prior to the interview to ensure that there was no misunderstanding about the concepts that were covered.

Participants were asked to choose a public location they would like to conduct the interview. If they were unsure, one was suggested. Australian participants were asked if they could meet at Bond University and Fijian participants were asked if they could meet at the University of the South Pacific.

#### *ii.* Data Collection

Before the interview was conducted, the interviewees were asked to consent to the taping of their interview. A few written notes were taken in order to help steer the interview but this was kept to a minimum to avoid interference. The recorded sound files were then transcribed verbatim so they were in a text-based, electronic format to be used in the final analysis. Two participants who disagreed to the use of audiotaping agreed to be contacted via email if further questions were needed.

An audit trail was created to facilitate reproducibility and verification of findings. Identifying information was removed from the transcripts. A list linking codes to names was kept separately in a secure place at Bond University in a locked cabinet. This list was kept to be able to withdraw data in case consent was withdrawn at a later stage.

The researcher documented each step taken in the data collection and analysis process and recorded emerging issues in data analysis. An integral aspect of qualitative research is reflection. The researcher adopted a self-critical attitude toward how their observations and interpretations might be biased by preconception; also known as reflexivity (Thomas & Thomas 1928). This also included awareness that their presence in the field might have distorted their findings.

After giving a brief summary of the project, the participants were first asked background information to give a general understanding of how they acquire knowledge and their level of media consumption (see appendix a). A look into how many hours are spent with media on a daily basis was done. Also, taking note of how often they notice medical information in media

and more specifically, menopause being mentioned. Questions were then asked regarding what medical treatment they used while they were growing up, and what medical treatment they currently use (CAM vs. allopathic). Further, they were asked how they would normally choose what medical treatment to use—where they seek knowledge for medical care options. Next, the participants were given four different advertisements (two CAM treatments and two allopathic treatments) for menopause symptoms. They were given the advertisements one at a time (in no set order). They were then asked general questions on whether they would want to use the particular treatment and why. Their choice of which treatment they would prefer using was observed as well as a look into how they use evidence in choosing a treatment; whether they read the fine-print, whether they questioned the results, and which words and illustrations were acknowledged.

#### *iii.* Choice of Advertisements

There are numerous allopathic and CAM treatment options for menopause. In order to narrow the number of advertisements to select from, the leading two allopathic and leading two CAM products were selected from a country other than Australia or Fiji. The United States was selected as the country to choose from because it allows DTC advertising for both prescription drugs and CAM. Although Fiji also allows both types of advertising, the United States had more available research statistics to find the leading brands—in fact, there are no data on marketed CAM products in Fiji.

Oestrogen is the most frequently prescribed medication in the United States and is said to be the most effective for menopausal symptoms (Bradshaw 2008; Mayo Clinic 2010). The brand that is most commonly prescribed for oestrogen treatment is Premarin (Bradshaw 2008; Brinchkman 2002). After oestrogen, anti-depressants are the second most prescribed medication for menopause. Fluoxetine is the most widely used; it is used under the name Sarafem (Bradshaw 2008; Brinchkman 2002). Therefore, the products used in this study for allopathic treatment were Premarin and Sarafem.

Black cohosh is the most used CAM for menopause symptoms in the U.S and internationally (NAMS 2007). The most well known brand is Remifemin (NIH 2009). The second most used CAM for menopause is red clover (NAMS 2007). Promensil is a red clover

product targeted at menopausal woman that had the highest sales in 2009 throughout the United States. Hence, Remifemin and Promensil were chosen as the CAM products for this study.

To make sure the chosen advertisements were similar to those for other allopathic and CAM treatments, several advertisements were reviewed. Common elements were discovered between different promotions that verified they were a representative advertisement for that particular treatment. For example, a Premarin advertisement is very similar to other oestrogen based treatment advertisements in relation to symptom relief, how it works, side effects and other safety information.

When the study found that the advertisements were representative of all allopathic and CAM announcements for menopause, the product information and photographs were then taken from the official company website. This selection was then used as the advertisements that were used in the interview process (see appendix b).

## iv. Data Analysis

The data was analysed inductively using a thematic process; therefore, the themes emerged from the data without prior bias from the researcher.

Since this was a qualitative study, data analysis was an on-going process that took place throughout the data collection (Kvale & Steinar 1996). There was a set interview schedule (see appendix a), which was developed beforehand. However, the researcher adapted and changed interview questions as needed, depending on each individual interviewee. Emerging themes were also reflected upon during each interview. Although the leading analysis was thematic, comparative analysis was also used. Interviewees' data were compared and contrasted until the researcher felt no new issues or themes were arising (Coffey & Atkinson 1996). Overall, the researcher was moving backwards and forwards between transcripts, notes, and the research literature.

Interview transcripts for each participant were read and coded for themes. Themes common among participants were then identified and described. Boyatzis (1998) Three coders (the lead researcher and two media professors from the University of the South Pacific—Imraz Iqbal Ali and Masada Vuinakadavu) independently coded and put the transcriptions into themes. The three then met to review all coding results and to clarify areas of difference—this was done

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until a consensus was reached.

Themes began to be determined based on Mayring (2000) description of qualitative interview analysis. "Adjectives used in descriptions (positive and negative) which gave strong indications" of the interviewees attitude ("e.g. it was 'disgusting"). Also, "tonal qualities such as aggressiveness, sarcasm, flippancy, emotional language" were used to determine the narrator's point of view (Mayring 2000). Themes were then organized into six groups that represented interviewees responses.

A computer software program, Nvivo (version 7) was also used to help organise and access the data. By only using a mechanical process, it would stop the researcher from becoming familiar with the data and the process could not think about, judge or interpret the qualitative data. Therefore, Nvivo was used only to locate particular words and phrases, put them into alphabetical order, as well as count occurrences of words and phrases. This was then used to verify what the three observers had discovered.

# V. Results

# Content Analysis Results:

The comments from each country's magazines were first organised separately. There were 26 labels found in the Fijian media and 21 in the Australian media. The comments were then combined into six themes (see table one). These six themes represent a mutually exclusive list of CAM and allopathic articles presented in the following media outlets: *Mai Life, Marama, Women's Weekly*, and *Women's Health and Fitness au*.

Table One identifies the themes that emerged in this study in the Fijian and Australian articles.

Table One: Main Themes from Fijian and Australian Magazines

Fijian Print	Australian Print
1. The Cure for the Poor 17/20	1. Promotional Media for CAM 16/20
2. Anonymous Reports Claiming CAM is Effective	2, CAM is More Sensible Than Allopathic
11/20	4/20
3. Personal Accounts of CAM as Unsafe 9/20	3. CAM is a Safe Method 11/20

The first research question raised the issue of what CAM and allopathic messages are evident in the images and articles present in four leading magazines published and distributed in Fiji and Australia. As these themes express, there were numerous findings that show an opposite media reporting of CAM treatment between these two countries.

The emergent themes are individually described below.

# **Fijian Text**

# 1. The Cure for the Poor

The articles present in Fijian magazines promote that if you have less money, you will use CAM more than conventional medicine. They also present that not using CAM is better for you, and that CAM is not as effective as allopathic medicine.

(17/20) articles made a direct statement regarding the reader's financial situation and his or her ability to contact a health service at an affordable cost. They suggest that CAM is a low cost treatment option that is used by the less fortunate. This suggests that the reader's economic resources influence his or her decision.

In an article discussing the current medical practices used by villagers titled "Herbal medicine still used in villages" in *Mai Life* (November 2009), different treatments for medical diseases are discussed. The author of the article argues that villagers have not had the "benefits" of "proper" health workers who could teach them how to actually treat a disease instead of "imaginary ways" they have found: "Villagers keep going deep into the forests to get herbal medicine.... Nothing has seemed to work.... We need to send in volunteers to supply them with proper medical supplies" (p. 2).

Similarly, in the same month (November 2009) the magazine *Marama* clearly states that only the poor seek herbal therapy: "Some people seek herbal therapy if they are poor or do not have access to medical facilities" (p. 10).

An article for an alternative health retreat run by local Indo-Fijians, which appeared in the November 2009 issue of *Mai Life* discusses how a 51-year-old woman from Nakasi, Fiji had been diagnosed with ovarian cancer. It explains that she did not have much money for treatment, so she chose to go to a free alternative care facility. Her niece was quoted as saying: "My auntie was cured by going to the Three Angels Missionary College [in Tavua]. She was given a detox diet and treated with special herbs" (p. 14).

The December issue of 2009 of *Mai Life* describes that doctors have been trained "appropriately" with allopathic care and that seeking medical help from anyone besides a qualified allopathic doctor would generate further health problems. The title of this article was "Bogus Medicine Man" and states: "Beware of people claiming they have the ability to treat your ailments who aren't associated with a medical clinic…Doctors have a license for a reason" (p. 22).

## 2. Anonymous Reports Claiming CAM is Effective

This theme represents articles that display CAM positively, and are direct quotes from a citizen. No author is named, and the editor is allowing someone to tell his or her story. Therefore, no one representing the newspaper is acknowledged for promoting CAM, which ultimately devalues the report and puts down CAM. This was seen in 11/20 articles.

In the January 2010 issue of *Mai Life*, they write about the Korokolevu Villagers lifestyle and in the process state: "People take leaves from the Drale tree, and use the juice squeezed from the leaves" (p. 7). One villager said this treats such conditions as "diarrhoea, sharp headaches, and slight fever" (p. 7).

The same month in *Marama*, a similar story about another village was written. It was stated that in Wainadoi, a-19-year-old boy was not healing appropriately after having his arm cut off. The villagers could not afford to pay "modern or Western medicines" like antibiotics to keep it from getting infected. The story goes on to explain that the boy was suffering for almost a week when an "angel" appeared and told him he needed to wrap it in the leaves from a particular tree and drink boiled water which was soaked in the bark of the same tree. The people around him thought the infection had affected his thinking, but within a few days, the boy started to heal and continued to get better. The boy was quoted as saying: "Villagers witnessed what happened to me and believed in the miracle of the Waindradra tree" (p. 12).

This story narrated in *Marama* is one of many of its kind, and as a whole, these stories demonstrate that the use has as much to do with the price of affordable treatment as it does with traditional knowledge.

# 3. Personal Accounts of CAM as Unsafe

This theme embodies stories that discuss CAM use as being unsafe. Unlike the previous theme, which is illustrated by quotes from citizens, these stories were experienced directly by the author. This was seen in 9/20 articles.

In the November 2009 issue of *Marama*, there is a story titled "A unique and possibly unsafe method" (p. 3). The title represents the current medical standpoint on CAM use. On one hand, it is rather unique compared with more modern treatments, but on other hand, the safeness

of it is in serious question. This particular article goes on to discuss dried leaves of a local tree were being used to treat muscle aches as well as headaches. In the ending paragraphs, it elaborates on how using these leaves resulted in no positive cures of the ailments, but rather caused other problems such as diarrhoea. There were no other reasons stated for its ineffectiveness.

In the next issue of *Marama* (December 2009) there is a story describing the Namosi villagers. The story writes about the daily life of the villagers and included is the following quote: "An unfamiliar method Namosi villagers were attempting to use to treat cuts and bruises was the mile-a-minute plant" (p. 22). It goes on to say that the use of this plant for such conditions should be avoided as it is "unsafe" and an antiseptic from a "proper" pharmacy should be used.

Another story discussing the use of dried plants was found in the November 2009 issue of *Mai Life*. This article was writing about the use of dried seaweed by many local citizens and states that "proper medical care" should be sought instead:

".... It has been found that dried seaweed, that is then boiled, is commonly used to treat diarrhoea and this should be a concern for all...No one knows the safety of such methods and such issues should have proper medical care" (p. 20).

# **Australian Text**

## 1. Promotional Media for CAM

This theme refers to articles, which appear to be advertising CAM products. They are articles discussing CAM products with a significant positive manner, especially focusing on their healing capabilities and treatment possibilities. They do not state anything about allopathic options in these articles. The absence of these allopathic treatments suggests the readers are not getting the full range of treatments offered; it is biased only to CAM. This was seen in an overwhelming amount of articles, 16/20.

In the November 2009 issue of *Women's Health and Fitness au*, there is an article discussing an herbal formula for urinary tract infection. It talks about the high prevalence of the

symptom and states: "Ethical Nutrients Urinary Tract Support is a unique herbal formula which has been shown to reduce symptoms of urinary tract infection" (p.20). They highlight the unique nature of this because it is a "special herbal combination" that has shown to provide relief for many women (p. 20).

A similar story titled, "Cystitis explained," was published in the December 2009 issue of *The Australian Women's Weekly* and states: "It's one of the most common, and most irritating, conditions in women, but natural approaches to prevention and treatment can help you beat the burn" (p. 5). The article emphasises the use of CAM to treat this condition by explaining how a single mother of two who had bacterial infection causing cystitis used cranberry pills that "quickly lessened the discomfort" (p.5).

The November 2009 issue of *The Australian Women's Weekly* makes a link between the use of natural therapies and a low rate of menopause symptoms: "Symptoms of menopause is virtually non-existent in traditional Asian societies, where natural therapies are used extensively" (p. 160).

What this article suggests is that Asian societies, well known for their herbal remedies, are less likely to experience menopause because they use more natural ways to cure the body. This article seems to be playing on stereotypes to influence people.

## 2. CAM is More Sensible Than Allopathic

This theme presents articles that discuss both allopathic and CAM. Instead of giving both medical choices equal promotion and positive regard, there are significant displays that CAM is the best option. This theme represents articles that refer to allopathic treatment negatively in order to promote CAM. This was seen in 4/20 articles.

In the November 2009 issue of *Women's Health and Fitness au*, there is an article indicating the high prevalence of post-partum depression, which gives an overview of its different treatment options and states: "If we look at St. John's wort as an example, its side effects are not nearly as severe or frequent...In Europe it is prescribed five times as often as Prozac" (p. 12).

The Australian Women's Weekly December 2009 issue has a story about the high frequency of Attention Deficit Hyperactivity Disorder (ADHD). It provides an overview of the

condition and different treatment options and quotes: "Natural therapists consider ADHD as a symptom of many contributing factors and have safer and more effective treatment options" (p. 17).

A similar story was run in the January 2010 issue of *Women's Health and Fitness au* about ADHD. It gives an overview and treatment options and gives a push towards CAM when saying:

"Attention Deficit Hyperactivity Disorder (ADHD) is another contentious issue between natural therapists and the medical community at large. The medical community prefers to treat children with ADHD with medications that may have potential side effects such as increased heart rate and blood pressure, confusion, paranoia and hallucinations" (p. 6).

The article ends with a positive tone regarding CAM treatments for ADHD: "No serious side effects have resulted with the use of alternative care" (p.7), which in the article consists of changes in eating habits, yoga, and chiropractic care.

*The Australian Women's Weekly* January 2010 issue had an article regarding menopause, "Get Ahead of Middle Aged Spread" (p. 19). It discusses the wide use of antidepressants (such as Venlafaxine and Paroxetine) being sold as a treatment option and points out they do so even though they have not been tested for such use. They state:

"Another study by the department of psychology at the university of Hull is far from convinced that antidepressants are the answer, indicating they work no better than a placebo for most patients...Pharmaceutical companies have merely cherry-picked the best results of trials to make their drugs appear more effective...Antidepressants come with a myriad of side effects, many of them which are quite dangerous...." (p. 15).

The article concludes by offering alternative treatment options such as black cohosh, and points out that there is a low prevalence of side effects that can be harmful; (while it emphasizes that there is a low prevalence of side effects, as previously stated, it is true that certain side effects may exist. This articles favours CAM treatment, and this preference has eclipsed possible negative side effects from the argument).

The same month, *Women's Health and Fitness au* (January 2010) published a similar story regarding menopause. This story focuses on different symptoms, then states, while discussing treatment options, that the medical community gives treatments causing side effects, while natural therapists focus on managing the symptoms until the body adapts. The story says:

"Natural therapists strongly believe that the answer is to manage the symptoms until the body has adapted to the reduced levels of oestrogen. The medical community on the other hand, considers menopause as a disorder that requires continuous treatment, many times using synthetic hormones—which many times bring severe side effects" (p. 11).

These popular magazines promote CAM treatments by highlighting the negatives of allopathic treatment.

#### 3. CAM is a Safe Method

As the title implies, these articles promote CAM as being a safe option. Words such as safe, harmless, non-toxic and not dangerous were used frequently to reinforce this position. Variations of words implying "safe" were seen in 11/20 articles.

*Women's Health and Fitness au* 's November 2009 issue has an article that argues that detoxification (removing toxins from the body by using specialised diet techniques) is harmless and can eliminate the chances of pre-mature aging and can cure ulcers. It discusses a diet using a liquid combination of fresh lemon juice, maple syrup and cayenne pepper. No solid food is eaten for the entire detoxification. "Detoxification, as little as four times a year, is a harmless and effective treatment to eliminate toxins and pollutants which cause pre-mature aging...it can cure ulcers" (p. 14).

The next issue of *Women's Health and Fitness au* (December 2009) has an article describing Chinese herbal medicines as being "very safe when prescribed correctly by a properly

trained practitioner" (p. 9) It discusses Chinese medicines in a broad term that can be used for numerous treatments ranging from the common cold, to the flu and even impotency.

The December 2009 issue of *The Australian Women's Weekly* has an article describing Reiki. It quotes: "Reiki is safe; practitioners either make very light contact with finger tips, or do not touch the client" (p. 3).

## Interview Results:

There were a high number of women who came forward in response to the recruitment in both countries. A few were excluded due to familiarity with the interviewer. The first 20 responses in both countries were contacted and those who could specify a time and place of interview were recorded. The interviews began and when the interviewer felt data saturation and satisfaction with the demographics of the interviewees, the interviews were concluded (this occurred after thirteen participants from Fiji and thirteen participants from Australia were interviewed).

The 13 participants from both countries came from various backgrounds; some were wealthy, others poor, some were working-women (in numerous job positions); while others were stay at home mums. Some were Fijian others are Indo-Fijian; some were Australian while others were immigrants. Some of them were mothers; others had no children. Some were married; others were single (see table 2).

Table Two: Interviewees <sup>2</sup>	' Demographics and	Personal Information

	Fijian Demographics	Australian Demographics
Age group of	45-47 years: Four	45-47 years: Two
interviewees	48-50 years: Four	48-50 years: Four
	51-53 years: Three	51-53 years: Four
	52-55 years: Two	52-55 years: Three
Marital Status	Married: Six	Married: Three
	Divorced: Three	Divorced: Seven

	Widowed: Two	Widowed: One
	Single: Two	Single: Two
Educational Level	Some High School completed: Four	Some High School completed: Zero
	High school completed: Three	High school completed: Five
	Some College completed: Two	Some College completed: Three
	Bachelor's Degree completed: Two	Bachelor's Degree completed: Three
	Master's Degree completed: One	Master's Degree completed: One
	PhD completed: One	PhD completed: One
Offspring	Children: Eleven	Children: Ten
Identification	No-Children: Two	No-Children: Three

The thirteen participants in Australia were interviewed at a set location at Bond University. The Fijian interviews were conducted at a set location at University of South Pacific (8 interviews) and a set location at Fiji National University (5 interviews). These choices were chosen out of convenience to the interviewee, as well as providing a public and safe location for all. On average the interviews took around 45-50 minutes. The shortest interview being 35 minutes and the longest being 90 minutes.

Thematic Analysis of the transcripts revealed a number of factors that interact to influence a woman's decision to use CAM. Influences included a wide range of themes including: perceived objectivity of the media, upbringing, accessibility of care, relationships (with family and friends), the value of expert opinion, and safety (see Table three). Themes that emerged from the participants' interviews were pieced together to form a picture of the collective experience from the women of Fiji and Australia.

Emerging Themes	Interviews in which theme emerged
1.) Perceived Objectivity of the Media	
What the media write about (CAM vs.	Fiji: 5, 7, and 8
allopathic).	Australia: 1, 2, 3, 5 and 9
Advertisements with more words	Fiji: 9
have more power to influence	Australia: 9
Advertisements with more words scare	Fiji: 6 and 7
people off	Australia: 1
2.) Upbringing	
Changes in medical treatment choices	Fiji: CAM to Allopathic: 5
from child to adult	Australia: allopathic to CAM 1,2,3, and 8
Knowledge is not passed on/available	Fiji: 6,7, and 8
to younger generations	
If it's not a serious health problem,	Australia: 1, 10, and 11
it's better to try CAM first	
3.) Accessibility of Care	
People choose treatment options based	Fiji: 7, 8, and 10
on proximity of health facilities	
4.) Relationships (With Friends and	
Family)	
Word of mouth influences treatment	Fiji: 5
Choice (what people surrounding them	Australia: 2, 3, 6, 7 and 8
say is influential).	
5.) Value of an Expert Opinion	
Health professional's opinion (ie GP,	Fiji: 5, 6, 7, 8 and 10
Naturopath)	Australia: 8
Medical advice in media written by	Fiji: 3

# Table Three: Extended List of Emerging Themes Arising from Interviews

an 'expert.'	Australia: 9, 11
6.) Safety	
CAM as harmless because it is natural	Australia: 1,2 and 3
CAM is better because it is natural	Fiji: 5
	Australia 1,2, and 3
CAM is cheaper, but slower acting	Fiji: 5
Natural treatments have fewer side	Fiji: 5 and 7
Effects	

Author's note: The interviews that correspond to each main theme have been selected because they clearly highlight each theme. The list, however, is not conclusive.

### 1. Perceived Objectivity of the Media

In the Australian interviews, women felt that CAM is given more attention in the media than allopathy. "You always find something talking about naturopaths or natural healing remedies" (Australian interview 6). "Maybe it's what I pick up to read, but I don't see much about doctors clinics...I've been reading a lot of papers that talk about Reiki lately" (Australian Interview 8).

In the Fijian interviews, women expressed that allopathic medicine was given more attention in the media. "There's never anything in the papers talking about the treatments we used as children" (Fijian Interview 5). "T'm not sure. Maybe the government doesn't allow it...the only medical promotion I've read in the papers is regarding Suva private hospital or those new local...you know those local small pharmacists and clinics" (Fijian Interview 2). These findings confirm earlier suggestions that the media promotes CAM in Australia and allopathic medicine in Fiji.

Only few said equal information was given to both treatments. "I don't know...I'd say you hear a little bit of both. There's not much about either but I don't read (Fijian Interview 7).

## 2. Upbringing

The majority of Australian participants were brought up using allopathic medicine in their childhood, but today tend to use both CAM and allopathic depending on the severity of the problem. Most stated they do not use both treatments in conjunction with each other.—One participant in the youngest age group said—when asked what she typically does for any ailment:

"I'll go to my naturopath (an alternative care consultant) if it's something that

hasn't cleared up on its own...I've used the same one for five years now. If the issue continues after trying my naturopath's suggestion, I'd probably go to a clinic...I haven't gone to a clinic in probably [long pause] six years now...I get my annual check through my naturopath" (Australian Interview 4).

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Later in the interview, when asked what she did as a child for any ailment, she responded: "My mum would take me to the doctor...I didn't get into other forms, like naturopaths until after she passed." She didn't feel losing her mother made her choose alternative care, she just responded by saying "It was easier to make my own decisions."

Those who have continuously used allopathic medicine and continue to use this treatment did not have negative things to say about CAM care. Instead, they said they tended not to change something that had been working for them for years. A participant in the first age group said:

"I'm a nurse myself...I've heard patients say they've used some sort of alternative medicine to fix their woes...my daughter in fact is a frequent user of alternative care. Fortunately I haven't had anything serious happen yet in my life...I've always used what you're referring to as allopathic care...As a nurse, I suggest what I'm familiar with because I've seen it work for others...any slight fever or something I have, it seems to work" (Australian Interview 11).

The women from Fiji tended to grow up using CAM treatments. Currently, they tend to use mostly allopathic treatment. One participant in the first age group said:

"I grew up in the village...my children grew up in the city...I was raised by my buba (grandma) who would give hot water and leaves for an uneasy tummy...I would get milea-minute if I got any scraps...Living in the city I tend to take my children or myself for that matter, to the private clinic" (Fijian Interview 9).

# 3. Accessibility of Care

# Fijian Interviews

Some (7/13) women claimed they would use CAM treatment when available. However, they stated that the move from village life to city life has made CAM inaccessible.

"Finding the trees and plants I grew up using isn't easy to find here in Suva. And with my husband and me working, when someone gets sick, we just try to fix the problem as fast as possible. So I end up going to the doctor" (Fijian Interviewee 13).

Another interviewee made a very similar statement:

"My mother would always gather herbs when family members fell ill. The juice gathered while squeezing particular leaves would be used to bring relief... There was never a time where it didn't work. But recently, my son got sores on his tongue, I was going to try using leaves to treat it, but because they weren't right outside my office...and I wanted him to get the faster version, I took him to the doctor" (Fijian Interview 4).

# 4. Relationships (With Friends and Family)

An overwhelming majority of the Fijian interviewees (9/13) admitted that they trust and rely on other close friends to provide advice on particular medical treatments. In particular, these nine individuals reported that their closest friends or people with whom they had daily contact played an important and influential role about certain medical care. For instance, if friends and family used CAM care, then these interviewees said that they were more likely to use it as well, and vice-a-versa. One participant in the first age group demonstrates this point. While talking about her female family and friends from her village, she affirmed: "While sitting around for my morning tea, we all bring up what's on our minds. If I had something wrong, health related or anything, I'd ask them" (Fijian Interview 13).

This trend was also confirmed by another Fijian interviewee in the third age group, emphasizing:

"I have a strong social connection. I like to hear how others I know, what they would do. What has worked for them...or simply just to get others opinions...I don't trust my own judgment, especially when it comes to my families or my own health" (Fijian Interview 4). These two participants have been selected to represent the voices of the 9/13 women who felt the same way because they also represent the age groups just after the beginning and towards the end of menopause.

# 5. Value of an Expert Opinion

Expert opinion was the most frequently stated reason for choosing medical treatment for Australian interviewees. Many stated a General Practitioner (GP) or any type of doctor is where they would seek their medical information, others also stated published media reports were considered expert opinion. In either of the two cases, an expert opinion formed by a doctor or a media report on a drug is what they find the most appealing in choosing their medical treatment. In other words, although the result is not conclusive given the number of interviews conducted, Australian interviewees may be inclined to turn to a GP or other medical institution for recommendations regarding treatment options.

A participant in the first age group (45-47 years old) stated that she reads a lot and this is what causes her to know "a lot about heath care." She said she reads what others are doing and identifies what works and what doesn't. She clarified that what she reads is coming from some sort of doctor. "I don't just read people off the street information. I read what says, 'Doctor so and so says that..." (Australian interview 12).

A participant in the second age group (48-50 years old) stated: "I would go to a doctor first.... If I didn't like their suggestions, I'd likely try another one...I go to a naturopath" (Australian interview 3).

When asked why she sees a naturopath over an allopathic doctor, her response was: "They're [allopathic doctors] too general...they don't listen to you, just judge you off the other thousands of people they see.... naturopaths seem to ask more questions and get to the root of the problem" (Australian interview 3).

In the Fijian interviews 8/13 also stated that expert opinion was important for their health decisions. An interviewee in the third age group (51-53 years old) quoted that she "likes to read the health care reports from the pharmacies.... They tell you what the illness for the current

weather is and give suggestions on the best way to treat it.... All that info[rmation] is coming from a nurse, pharmacist, or doctor. So I trust it" (Fijian interview 9).

Also, while deciding which medical treatment to choose when given the advertisements, and being asked about the effectiveness of them, one interviewee in the fourth age group (54-55 years old) said if she wanted fast relief, she'd choose the hormone therapy because "That sounds like something my doctor would recommend" (Fijian Interview 2).

6. Safety

## Advertisement Examples:

To get a better understanding of how patients view different menopausal treatment options, the interviewees were given two allopathic and two CAM products advertisements to treat menopause, and their opinions where then asked with respect to each.

The advertisements for the two CAM treatments were the two leading products Promensil and Remifemin. The two leading allopathic advertisements were for the products Sarafem and Premarin (see Appendix B for additional information).

The widespread sentiment regarding Premarin is illustrated by the following two interview responses: "dangerous," (Fijian interview 8) and "unnecessary" (Australian interview 3). The word evidence-based listed on the package was not noted by any of the interviewees. None of the 26 interviewees pointed to this as the product they would choose.

Sarafem was chosen by three participants, all of who stated they would choose it because of its "basic" packaging. Saying, "this one doesn't try to tell you much....it must just work!" (Fijian interview 4). No other reasons were given besides the fact it wasn't trying to sell itself to the clients.

Most Australian interviewees responded by pointing out the two CAM products (Promensil and Remifemin) saying that a natural product is "less harsh for your body;" (Australian Interview 10) "better to try first...I feel it's safer;" (Australian Interview 6). "It might not work, but I'd give it a try before taking a prescription drug" (Australian Interview 1). Two interviewees pointed out the words "non-prescription," written on the box of Remifemin. These two interviewees choose this product as their choice of treatment option.

One Fijian interviewee said if given the decision she would choose red clover because "it's a plant and it's natural." She said, "the other ones have things hidden but plant extract is simply natural" (Fijian Interview 3). Red clover is written in small letters at the bottom of the Promensil box. Nowhere else on the box does it state it is a red clover product. The interviewee also stated she had not heard of the product prior to the interview.

Another Fijian stated: "I'd probably choose this one (Promensil)...it seems natural. But I'd go to the doctor...Isa (Fijian word for "oh my") I wouldn't feel safe making such a decision (Fijian Interview 12).

Only two of the 26 interviewees took the time to read the detailed description of the products. When asked at the end of the interview whether they would normally read the information before choosing a product, the majority said they would not, and a few said maybe.

# **VI. Discussion**

## a. Main Findings-Content Analysis

The first part of this study shows that in Fiji, popular magazines portray mainstream medicines as the preferred option, whereas in Australia, CAM is portrayed as the preferred option. Women in Australia are being more exposed to positive articles about CAM in women's magazines compared to positive allopathic articles. However, the opposite is true in Fiji. Women there are being exposed to articles, which are negative towards CAM products and treatments. The main conclusion of this investigation is that the mass media's involvement in writing articles on health care treatments for women who are experiencing menopause, should be examined further to determine if there may be a link on women's decision on which treatment to pursue.

This is especially important in Fiji and Australia, as there have been major changes in CAM and allopathic use (Amo 1995; Xue et al. 2007). The public needs to understand accurately how these treatments are going to affect their health and their lives. As Grierl & Bryant (2004) state: "There is consensus within the biomedicine and social science disciplines that discourse on medical reporting has a lack of straightforward and accurate reporting in the media" (p. 321). The consequences of this reported ambivalence needs further study.

#### Previous Studies Relevant to Findings

The existence of the media's influential power over one's health has been studied extensively (Mintzes B. 2002; Murray E. et al. 2004; Toop L. 2006). According to numerous studies, the news media is a major source of medical and health information for the general public (Carducci et al. 2011; Larsson et al. 2003; Nelkin 1996; Wilson et al. 2009). Studies done in other countries, such as the aforementioned National Health Council Survey, show that "58% of the general American public stated that they have changed their behavior or acted on information they have read or heard in a medical or health news report" (Roper Starch Worldwide Incorporated 1997). Among those who have searched for medical information online, 70% said that the information influenced their opinion on how an illness should be treated, 50% said that the information led them to ask their doctors new questions or obtain a second opinion,

and 28% said that the information affected their decision of whether to visit a doctor or not (The Pew Internet and American Life Project 1997). Therefore, it is critical to ensure that medical and health information in the media is accurate, relevant, and unbiased. It was pointed out by Shuchman and Wilkes (1997) that, "journalists are often limited by lack of training in scientific methodology, insufficient time and space for them to present a balanced story, competition to be the first to break a major story, and the need to attract the attention of viewers and listeners quickly. As a result, medical news is often sensationalized" (p. 979). In addition, studies are often reported in isolation, and there is generally no follow-up of previously reported stories. Also, "researchers and medical institutions sometimes use the media to increase public awareness in their research and to increase the chances of future research funding" (p. 981). Consequently, the quality of medical and health information in the news media is frequently below standard.

# Significance of Findings

Relating back to previous studies on mediated identity (Agger 1991), individuals learn how to do things through media, but they do not learn how to think through media. People model and compare themselves to the words and images presented in the media as well as gain attitudes and create representations of reality through them. Therefore, in relation to agenda setting, if media are consistently promoting allopathic over CAM, or vice-versa, individuals might lose their traditional outlook and change views to fit the messages being endorsed.

Additionally, if the media neglects their social responsibility to present the information regarding both treatments in an easy and understandable way that highlights both the benefits and the risks, they are misleading their public, which may jeopardize their health. So as not to negatively influence women looking for treatment during menopause, the findings of this investigation highlight the necessity and the obligation that media have to portray both treatment options fairly, and accurately.

According to the advisory board for Understanding Science at Berkeley University, "balanced reporting is generally considered good journalism, and balance does have its virtues. The public should be able to get information on all sides of an issue — but that doesn't mean that all sides of the issue deserve equal weight" (Understanding Science 2012). Therefore, the information on each treatment option should be discussed, but they do not necessarily deserve the same amount of information.

Further, the Berkeley advisory board also explains that media audiences must negotiate their way through a barrage of inconsistent and sometimes conflicting information about health products and therapies in order to understand the actual effectiveness, risks, or other secondary effects (Understanding Science 2012). This problem also stresses the importance of reporters and journalists who address menopausal treatments as agents with the power to influence. What journalists report or write may affect some women's choices. They have the added responsibility of investigating thoroughly the treatment, the products, the benefits and the like.

However, "journalists too can find themselves inundated with such information from a wide range of courses that may include the companies who manufacture the products, the researchers who may wish to promote their research findings and build a public profile, and the institutions that are engaged in promoting the breadth of their research activities" (Wilson et al. 2009, p. 1). They also have an added responsibility of investigating the veracity of the health care information that they are going to report, which often times may be unrealistic. Yet, if journalists fail to report the news accurately, as previously mentioned, treatments are not fairly covered and misconceptions are spread.

## Ways to Improve Shortcomings in Media

A possible solution to the shortcomings of health media reports may be the Australasian Medical Writers Association (AMWA). It provides a professional development program for members, which offers workshops each year for journalists wishing to expand their knowledge about medical writing.

A number of universities in Australia also offer degree programs in science communication and science journalism (Australasian Medical Writers Association 2010). The increasing prevalence and support of these programs may account for the 'modest improvements' in reporting that have been noted by Wilson and colleagues (Wilson et al. 2009, p. 1) and it is hoped that it will result in continued improvements. While better biomedical research methodology training for medical writers is not a new recommendation, it has not been adequately explored in terms of CAM reporting. For this reason, this investigation recommends that programs, such as AMWA, along with other developing programs in universities or others of similar nature, be explored further to note any benefits for CAM coverage. It is important to also note that writing programs would only be effective if all CAM<u>s</u> were tested, otherwise it would be difficult to weigh up the evidence.

Another possible solution would be to implement media literacy education programs to help inform the public how to interpret media as consumers. Media literacy encourages people to "ask questions about what they watch, hear, and read" (Hobbs 2006, p. 20). It helps provide tools for people to critically analyse messages including: "identifying author, purpose and point of view, examining construction techniques and genres, examining patters of media representation, and detecting propaganda, censorship, and bias (and reasons for these)" (Buckingham 2007). It also looks into such things as media ownership, or its funding model, and how that could affect the information presented (Hobbs 1998). A good place to begin providing these programs would be in schools and universities. Agenda setting would be less likely to influence readers if they were educated to develop media literacy.

Further, advisory boards that decide advertising regulations, such as the Publishers' Advertising Advisory Bureau (PAAB) should be a requirement for any article involving medical treatment. Media advisory boards for medical treatment is to ensure that "healthcare product communication for prescription, non-prescription, biological and natural health products is accurate, balanced and evidence-based, and reflects current and best practices" (Pharmaceutical Advertising Advisory Board [PAAB] 2012). It provides a "pre-clearance review that fosters trustworthy healthcare communications within the regulatory framework" (PAAB 2012).

The use of advisory boards before publishing a medical article would provide regulation on standards; making sure the audience is getting accurate information. It would be important to keep the advisory board up-to-date on media literacy as well to ensure the information being presented is safe and effective for the readers.

Finally, while this cross-cultural investigation advocates improvements for Fiji and Australia (simply because they were the cultures studied), implementation of media literacy programs, and the requirement of media advisory boards for medical information, are relevant to any society with media channels.

#### b. Main Findings-Interviews

The second part of this study focused specifically on women, aged 45-55 years, and their treatment choices during menopause—be it allopathic or CAM. Participants in both countries valued expert opinion regarding medical treatment. They tended to look at a GP or other types of doctors to get information on treatment options. They also used expert advice from media such as written reports and stories. Relationship with others influenced participants' decisions on health care as well. Participants tended to use medical treatments that were similar to friends and family. Finally, this study showed the importance of accessibility in choosing medical treatment. This was seen especially with the Fijian participants. Many did not have the option of driving a distance to receive a certain health treatment. If it was not in close proximity it was not an option. This study cannot say anything about the size and impact, but it does show that decision-making is complex and that there is a need to further investigate the role of each of the themes/components identified.

In regards to Fiji, where CAM treatment had always been the main choice of treatment throughout childhood and adolescence for the majority of the women interviewed, women are now deciding to choose allopathic treatments. While the link between what is causing this change is inconclusive, these switches in treatments, despite years of culture and traditional knowledge, must be explored further.

# Safety of Treatment

The interviewed women raise concerns about the safety of treatments, as portrayed by the media. For example, traditional HRT, as a specific example of an allopathic treatment, has been ridiculed in the tabloids and has led some of the women who were interviewed to try natural hormonal treatments for menopause (Keating et al. 1999; Moynihan et al. 2000). This was highlighted when the interviewees were asked to select a treatment from printed advertisements, and many choose products because the word "natural" was used.

This example reinforces one of the emerging themes in this investigation—CAM treatment is perceived as harmless because it is more natural, but being natural does not always guarantee a harmless product, as described here and in more detail in previous sections. The

misconception that natural and safe are synonyms needs to be analysed and changed so the public is better informed about the side effects of CAM medicines.

#### c. Limitations

#### Qualitative Research Methodology

Interviewees were aware that the topic was menopause, which might have been a sensitive topic. Therefore, the participants who responded might have different opinions from those who choose not to discuss such a topic. In the case that one of the participants was embarrassed by the topic, it is possible that their opinions or ideas may not have been expressed clearly enough to represent their actual perspective on the matter. However, the interviewer took measures to reduce this possibility by holding the interview in a comfortable environment and establishing contact with the interviewee before the interview. Also the word menopause was used at a minimum as well as other such phrases, and replaced by phrases such as "changes in menstrual cycle" or "a health condition that happens to women typically in their 40's and 50's," in order to provide a more comfortable environment and minimize any uneasiness regarding the health condition.

# Ethical considerations in doing research with different ethnicities

It was important for the researcher to consider how the interviewees perceive him/her; characteristics such as class, race, sex, and social distance are important factors that might have affected interview responses. Having a female interview other females about a woman's health condition would be expected to help reduce timidity. However, as a foreigner to the interviewees, it might be a hindrance because of the language barrier, which is why in Fiji an Indian/Fijian interpreter was used. The role of the interviewee and the interviewer, thus maximizing the comprehension and the findings of each interviewee (Fortier & Bishop 2004). Yet, there was still the potential for misunderstanding between researcher and interpreter as language is a complex system of communication. Some information might have been left out

between the interpreter and researcher and there was potential of the interpreter conveying participants' responses incorrectly.

# Sampling

The content analysis used a limited selection of media outlets. Although the research found a mutually exclusive list of CAM and allopathic articles presented in four leading magazines, there are other media forms that were not analyzed in this study such as newspapers, television advertisements, billboards, and other media that reach a broad range of people.

Further, the interviews provide clues and issues that play a role in women's decision making, however, the relative importance of the identified themes needs to be further investigated in larger representative groups of women.

#### VII. Future research

There are many reasons that might explain why people use CAM over allopathic treatments or vice-versa, and this report was an initial investigation into how media reports on both these treatments and how women make decisions for themselves. While this study intended to explore potential reasons, the complexity of the issue became more evident as other possible factors began to appear, many of which are listed in the emerging themes above.

Other research may want to look at the themes, personal experience and reliance on friends and family for advice, more closely. In Australia, women mentioned the importance of friends and family and their own experience regarding healthcare as an influence in their decision. This has been researched considerably in an Australian context, but more research is needed to understand why the results in Fiji were not similar, and determine any connection, if possible, to the media.

Also, the accessibility of healthcare, and the extent to which insurance is provided to citizens and the details of what is covered also need to be examined. This is important because the accessibility of health care was mentioned several times throughout the interviews conducted in Fiji. The role of insurance each person has, as public and private health insurances cover different treatments, needs to be explored and taken into account as well, since this could affect people's medical treatment choices.

Another investigation may want to look at whether disease awareness advertising (DAA) in Australia plays a role in what medical treatments people choose because although DTC advertising (DTCA) is not allowed, DAA typically contains information on a disease and it recommends that consumers seek out a doctor's help for further information. Hall et al. (2009) state, "companies can use DAA to sell treatments for certain conditions, and often run campaigns targeted at general practitioners" (p. 628). Therefore, this implies that pharmaceutical companies can indirectly promote medicines via DAA (Hall et al. 2009, 628). That investigation, then, would want to directly look at whether or not menopause is seen as a disease, and how perceptions of menopause, as a disease or not, change. This would also need to be crosschecked with the DAA and DTCA advertisements to see how treatment options are portrayed.

## XIII. Conclusion

Content analysis and interviews about choices for management of symptoms of menopause raise awareness of the gaps in the regulation of both CAM and allopathic health products in regard to determining a standard of medical information portrayed in media. Unlike scientific publications, media messages are not peer reviewed. It is suggested that a balanced story is a good story, but it is an ethical code that has limited regulation.

As a result, this investigation highlights two main needs: the necessity to reconsider media literacy programs as a way to counterbalance unintended negative effects of medical treatments presented in media, and to implement a change in regulations of media policies to ensure that readers are advised on a range of treatments; not making it illegal to report on any particular type of treatment as long as it is presented accurately.

Media literacy programs could teach consumers to become conscious of their media use and decide for themselves if they were given factual and accurate reports. It would be a faster and more reliable process to inform the public how to breakdown the messages they are being told, than to simply rely on media to produce factual and appropriate communication.

Although the regulation of media would be difficult, this study advises a greater attempt to create an advisory board that would be responsible for creating a standard guideline for medical information presented in media. If an article or advertisement is to be publicly presented, it should be regulated similar to scientific publications and/or peer reviewed. Having a set policy would make it more difficult for dangerous products or products with little to no evidence base, to be promoted. The advisory board would also ensure that all types of medical treatment could be advertised. There must, however, be a safety measure in place; not all treatments should be promoted unless they are shown to not have negative effects.

The suggestion of implementing media literacy and producing advisory boards for medical information in media would be advisable to any location with mass media. Media literacy is not promoted in the majority of public education. Unless a person studies this topic in higher education, it would be difficult to decipher media messages and their impact on individuals and on society as a whole. As evidence-based practice is taught to doctors and health professionals, critical appraisal skills for media literacy should be taught to all.

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## **X: Appendices**

#### a. Interview Schedule

#### **Before giving Advertisements:**

-How many hours of media do you consume per day.... Internet? Radio? Television? Magazines? Newspaper?

-Have you read anything in regards to menopause in any media you've looked at in the last few months?

-Have you read anything in regards to any medical treatment options in the media lately?

-Do you feel the media you consume gives a preference to CAM..Allopathic...or do both get equal treatment?

-Growing up, did you tend to use medical care from hospitals or traditional medicine?

-Today, what do you tend to use? Why-most important factors in choosing treatment?

-What are your opinions of both medical systems?

-How'd you learn about both?

-How do you decide what information to use to decide?

-How do you know it's truthful?

-Have you heard of menopause.... -If yes, explain, if no explain to them

-Have you experienced any symptoms of menopause? If so, explain...

-How'd you go about treatment, who did you discuss any issues with (friends, doctor, parents, etc)

-What information would you need before making a choice on menopause treatment?

-What would you regard as evidence for treatment options?

-Have you known anyone who has gone through/is going through menopause? -How do you feel they should relieve their symptoms if any? -What did the person choose for choice of treatment?

#### After giving Advertisements:

-Which one they'd prefer using?

-Explain order they'd rank the products

(Probe deep at decisions): what do they look at to decide, explanations about how they came to their conclusion, where they got previous knowledge to judge)

-Which one they'd prefer using, why?

-Does the provided information help them make a choice? -If yes, what part of the information? -If no, what does?

--What in this ad do you consider evidence?

## b: Advertisement choices

# i. Remifemin



# **Remifemin**

Maybe you're not ready for HRT, but you *are* ready for the safe, natural alternative for the treatment of perimenopause and menopause symptoms.<sup>†</sup> Then you're ready for <u>Remifemin</u>!

Safe, estrogen free, natural black cohosh alternative to hormone replacement therapy for menopausal symptoms. Gluten free and laboratory tested

# Lab Tested

As a pioneer in science-based supplements, we have a pharmaceutical-minded commitment to quality from the moment ingredients arrive, to the day finished supplements ship from our FDA-registered manufacturing facility.

## Why use a natural menopause formula?

## More effective than soy

Black cohosh has been proven to be more effective than soy at relieving menopausal symptoms<sup>†</sup>

# For natural relief and a real alternative.<sup>†</sup>

A reliable, clinically-studied black cohosh extract can provide natural relief from hot flashes, night sweats, mood swings.<sup>†</sup> It allows you to have a strong alternative to Hormone Replacement Therapy (HRT) for the treatment of menopausal symptoms.<sup>†</sup>

# Why use Remifemin<sup>®</sup>? It provides time-tested, estrogen-free relief.

Remifemin<sup>®</sup> provides effective relief for a 70% reduction of hot flashes, night sweats, irritability, mood swings and occasional sleeplessness and anxiety.<sup>†</sup> In fact, over 15 clinical studies prove it's a safe and effective alternative to HRT for the treatment of menopausal symptoms, thanks to its completely estrogen-free RemiSure<sup>TM</sup> black cohosh.<sup>†</sup>

#### ii. Promensil



# **Promensil**

Offers clinically supported, natural products for women to maintain and enhance their vigour, well being, health and quality of life.

Formulated with red clover isoflavones, Promensil Menopause helps relieve menopause symptoms including hot flushes, hot flashes and night sweats as well as supporting bone and heart health, making it an ideal alternative to Hormone Replacement Therapy (HRT).

Promensil Vitality is specially formulated with red clover isoflavones and calcium and Vitamin D to help treat and prevent osteoporosis and maintain heart health for women after menopause.

#### What does Promensil Menopause do?

Promensil has been shown to have the potential to:

Relieve the symptoms of menopause Relieve hot flushes by reducing the severity and the frequency Relieve night sweats Help maintain bone health Help maintain cardiovascular and heart health

#### What's in Promensil Menopause?

Each tablet of Promensil Menopause is standardised to contain a total of 40 mg of four standardised isoflavones, genistein, daidzein, formononetin and biochanin sourced from red clover (Trifolium pratense). The biologically active ingredients are naturally occurring plant compounds, which are NOT chemically synthesised.

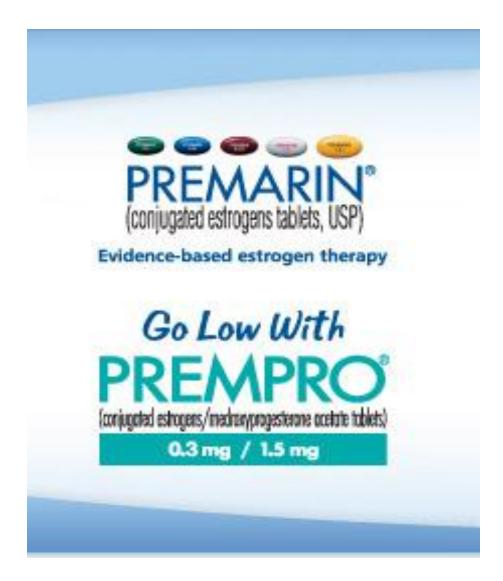
Promensil Menopause is made with no added sugar, yeast, milk derivatives, wheat and corn starch, gluten, preservatives, artificial colours and flavours.

#### How does Promensil Menopause work?

Isoflavones are phytoestrogens, which literally means, plant oestrogens. Isoflavones are similar in chemical structure to the body's own oestrogen, and when consumed in adequate amounts they are able to mimic some of the effects of oestrogen to assist with maintaining health and well being. Isoflavones however are weaker than our natural oestrogen, and are selective in their action in the body. Isoflavones supplement the needs of women over 45 when levels of hormones are declining.

#### **Clinical trials**

Novogen has conducted clinical trials throughout the world to demonstrate the benefits of Promensil Menopause for the alleviation of menopausal symptoms including hot flushes and feeling of well-being. As we speak, even more global research is underway to further expand upon our knowledge of isoflavones and health. Promensil Menopause trials have been published in scientific and medical journals. All studies were conducted by specialists in universities, clinics and teaching hospitals under Good Clinical Research Practice guidelines. iii. Premarin



# **Premarin**

Is a hormone therapy that contains a combination of estrogen and a progestin. It is a medication your doctor can prescribe to help you manage <u>moderate to severe symptoms</u> of menopause, like hot flashes, night sweats, and vaginal symptoms.

PREMARIN contains estrogens and a progestin and therefore is for women with a uterus who are undergoing natural menopause. If you do not have symptoms, you should consider non-estrogen treatments carefully before taking PREMARIN solely for the prevention of postmenopausal osteoporosis.

Estrogen therapy has been an effective treatment option for menopausal symptoms for over 60 years. Today, the U.S. Food and Drug Administration (FDA) recommends that women who choose hormone therapy to manage menopausal symptoms should use the lowest effective dose for the shortest duration consistent with treatment goals and risks.

Wyeth offers PREMARIN 0.3 mg/1.5 mg, the lowest proven effective starting dose of PREMARIN available today.

Low doses of PREMARIN, such as 0.3 mg/1.5 mg and 0.45 mg/1.5 mg, have been proven to effectively relieve moderate to severe hot flashes, night sweats, and vaginal symptoms.

- You may start to feel relief from hot flashes in as little as 2 to 3 weeks.
- Hot flashes and night sweats are likely to become less frequent and less intense. This trend will continue over time.

PREMARIN relieves menopausal symptoms even at the lowest dose.

#### **Preventing osteoporosis**

Postmenopausal women are especially susceptible to fractures of the hip, wrist, and spine. PREMPRO can help reduce your chances of developing osteoporosis because it has been shown to increase bone mineral density at the hip and spine and help prevent postmenopausal osteoporosis.

- In the first few years after menopause, you may begin to rapidly lose bone mineral density.
- PREMPRO has been proven to increase bone mineral density at the hip and spine and help prevent postmenopausal osteoporosis.
- PREMPRO has been proven to alleviate moderate to severe menopausal symptoms, such as hot flashes, night sweats, and vaginal symptoms

If you use PREMPRO, a hormone therapy containing estrogens and a progestin, only to prevent postmenopausal osteoporosis, talk with your health care professional about whether a different treatment—or medicine without estrogens—might be more appropriate for you.

## **Important Safety Information**

• Estrogens increase the chance of getting cancer of the uterus.

Report any unusual vaginal bleeding right away while you are using these products. Vaginal bleeding after menopause may be a warning sign of cancer of the uterus (womb). Your health care provider should check any unusual vaginal bleeding to find out the cause.

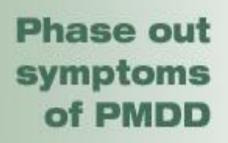
• Do not use estrogens with or without progestins to prevent heart disease, heart attacks, strokes, or dementia.

Using estrogens, with or without progestins, may increase your chance of getting heart attacks, strokes, breast cancer, and blood clots. Using estrogens, with or without progestins, may increase your chance of getting dementia, based on a study of women age 65 years or older. You and your health care provider should talk regularly about whether you still need treatment with estrogens.

PREMPRO<sup>®</sup> (conjugated estrogens/medroxyprogesterone acetate tablets) is used after menopause in women who have a uterus to reduce moderate to severe hot flashes; to treat moderate to severe dryness, itching, and burning, in and around the vagina; and to help reduce your chances of getting osteoporosis (thin weak bones).

In a clinical trial, the most commonly reported ( $\geq$ 5%) side effects that occurred more frequently with PREMPRO 0.45 mg/1.5 mg and PREMPRO 0.625 mg/2.5 mg than with placebo were breast pain/enlargement, vaginitis due to yeast or other causes, leg cramps, vaginal spotting/bleeding, and painful menstruation. In a clinical trial, there was no difference in the commonly reported ( $\geq$ 5%) side effects for women taking PREMPRO 0.3 mg/1.5 mg compared to those taking placebo.

iv. Sarafem





# **Sarafem**

Is an FDA-approved prescription treatment that relieves both the mood and physical symptoms of PMDD (Premenstrual Dysphoric Disorder). Many physicians believe that Sarafem helps to correct the imbalance of serotonin that could contribute to PMDD.

## How to take Sarafem

Take **Sarafem** as prescribed by your doctor. It's usually taken in a single daily dose in the morning, either every day of the month or only during a certain part of the month.

You can take Sarafem with or without food.

In clinical studies, **Sarafem** helped relieve PMDD symptoms of most women. It's important to take **Sarafem** as prescribed to help control your symptoms.

## What to expect from Sarafem

With treatment, you should begin to feel relief from both your mood and physical PMDD symptoms. In clinical studies, symptom relief included decreases in irritability, mood swings, tiredness, tension, and breast tenderness. Many women also reported an improved interest in social activities.

Even though you may start to feel better, your doctor may continue treatment to keep your PMDD symptoms under control. Stopping treatment may cause your symptoms to return. Talk to your doctor before you stop treatment. You should also talk to him or her about how long you should continue treatment.

### c: Additional Interview Quotes

## Perceived objectivity of the media:

"My son tells me a few things he reads in the newspaper...mainly telling me what I tell him to do is wrong." –She went on to explain that she would suggest natural treatments that she used growing up and the newspaper would have negative stories about these types of treatments (Fijian Interviewee 7).

"I see a lot of info on changes in lifestyle....exercise, nutritional changes....you know 'natural' suggestions" (Australian Interviewee 5).

"This one here [pointing at Premarin], has a lot of descriptions....it sounds like it needs to defend itself...I'm sure it's the least effective too" (Fijian Interviewee 6).

# **Upbringing:**

"I thought once I would write what I know and put it in a book for my kids....maybe one day I'll still get to that....they didn't get to hear everything I did when I was growing up (Fijian Interviewee 8).

## Accessibility of Care:

"The amount of land we had in the village was far greater then what my kids have...We live on a quarter acre and have maybe [pause] one tree...I remember my mum tending our garden which had leaves and roots that she would use as home remedies for different health problems" (Fijian Interviewee ).

# **Relationships with Family and Friends:**

"I admit that I'd like to know what others are doing" (Australian Interviewee 3).

"My daughter talks to me a lot about different things I should be including in my diet...I like to hear what she has to say" (Australian Interviewee 8).

#### Value of expert opinion:

"I only work part-time now so I spend more time on the internet then I used to....I read about different health topics and I'd say they influence my opinion" (Australian Interviewee).

d: Additional Information on Content analysis:

The precise methodology best used for qualitative message or text analysis is poorly defined. McKee (2004) notes that, "we have a very odd lacuna at the heart of cultural studies of the media. Textual analysis is the central methodology, and yet we do not have a straightforward published guide as to what it is and how we do it." He explains this as partly:

"The ambivalence of cultural studies practitioners towards disciplinarity and institutionalization [which] lead (sic) to an odd interpretation of our axioms that knowledge is power, that discourses define reality and that there is no such thing as 'objective' knowledge. We know that every methodology is partial, producing particular kinds of information. Linked with an anti-displinarian trend, this seems to have led us to refuse to think seriously about our own methodologies. Instead, we tend towards a kind of 'transgressive' methodological approach, where we do whatever takes our fancy" (McKee 2004)

McKee 2004 adds: "we insist that the specificity of any methodology must be investigated to reveal the limits to the kinds of knowledge it can produce, and yet our own central methodology is woefully under investigated, and still largely intuitive."

Despite this lack of specific guidelines for qualitative text analysis, research procedures for qualitative text and message analysis are informed by the work of Denzin and Lincoln (1994); Hijams (1996); Mayring (2000; 2003); Patton (1990; 2002); Robson (1993); and Silverman (1993) and these can be drawn on to frame a study with reasonable levels of reliability and validity. Qualitative message analysis methods applicable to analysis of media content include text analysis, narrative analysis, rhetorical analysis, discourse analysis, interpretative analysis and semiotic analysis, as well as some of the techniques used in literary studies such as critical analysis, according to Hijams (1996).

Within the broad hermeneutic tradition concerned with text analysis, there are two main strands particularly relevant to qualitative content analysis. The first, narratology, focuses on the narrative or story-telling within a text with emphasis on meaning that may be produced by its structure and choice of words. The second draws on semiotics and focuses attention on signs and sign systems in texts and how readers might interpret (decode) those signs (Newbold et al., 2002, p. 84).

Semiotics utilizes a number of different approaches, description of which is outside the scope of this paper other than a broad summary of their essential elements. Two main streams of semiotics, sometimes referred to as semiology and semiotics, have evolved from the work of Swiss linguist Ferdinand de Saussure and American Charles Sanders Peirce respectively.

While quantitative content analysis has its complexities and requires rigid requirements, the coding task in quantitative analysis is mainly "one of clerical recording", according to Potter and Levine-Donnerstein (1999, p. 265).

Key text elements commonly studied in qualitative content analysis are:

- "Adjectives used in descriptions (positive and negative) which give strong indications of a speaker's and writer's attitude (e.g. it was 'disgusting');
- Metaphors and similes used (e.g. labelling a car a 'lemon' or a person a 'rat');
- Whether verbs are active or passive voice;

- Viewpoint of the narrator (i.e. first person, second person, third person);
- Tonal qualities such as aggressiveness, sarcasm, flippancy, emotional language;
- Binaries established in texts and how these are positioned and used;
- Visual imagery in text; and
- Context factors such as the position and credibility of spokespersons or sources quoted which affects meaning taken from the text (e.g. if one message is presented by a high profile expert it will generally outweigh a non-expert opinion).

Mayring (2000) developed a number of procedures for qualitative text analysis, among which he says two are central: inductive category development and deductive category application.

Inductive analysis involves working from specific observations of categories and patterns (eg. issues or messages) to a broad theory or conclusion. Deductive analysis involves working from a broad theory or general position to specific observations to confirm or disprove the former (Trochim, 2002). After inductively determining categories, Mayring (2003) says "the qualitative step of analysis consists in a methodological controlled assignment of the category to the passage of the text". Mayring's procedures bring some systematic approach to qualitative text analysis. In essence, his method involves *a priori* design of the categories – they should not be created as the analyst goes along – and, importantly, this method requires matching of a category to a passage of text; not matching of the text to a category. By starting with predetermine categories, which by their nature are specific, this increases the systematicity of qualitative analysis.