

PROCEEDING

“Harmony of Caring and Healing Inquiry for Holistic Nursing Practice; Enhancing Quality of Care”

Semarang, 20 – 21 August 2015



PROCEEDING

3rd JAVA INTERNATIONAL NURSING CONFERENCE 2015

*“Harmony of Caring and Healing
Inquiry for Holistic Nursing Practice;
Enhancing Quality of Care”*

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“HARMONY OF CARING AND HEALING INQUIRY FOR HOLISTIC NURSING PRACTICE; ENHANCING QUALITY OF CARE”

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*“Harmony of Caring and Healing Inquiry for Holistic
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PREFACE

The 3rd Java International Nursing Conference (JINC-2015) is a leading forum which provides opportunities for the delegates to exchange knowledge, new ideas, best practices and application experiences face to face, to establish academic and research relation and networking, and to find global partners for future collaboration on various of interest in health education field. This conference conducts a series of scientific activities including a keynote speech, plenary speeches, concurrent sessions, and poster presentations. It is a continuing program after twice JINC which successfully held by School of Nursing, Faculty of Medicine, Diponegoro University on 2010 and 2012. Moreover, this event is attended by speakers from domestic and also from other countries who are experts in their fields. Also, we invite participants from all regions in Indonesia and foreign countries.

The theme of this conference is *“Harmony of Caring and Healing Inquiry for Holistic Nursing Practice; Enhancing Quality of Care”*. This theme developed from the fact where the achievement of quality health care can only be obtained with a holistic integrated health services. Holistic health care includes the shape of health services that address the needs of biological, psychological, social, and spiritual. To achieve optimum service, there are some things to consider such aspects reliability, i.e. the ability to perform the promised service as consistent and reliable, as well as aspects of assurance (certainty) that includes the knowledge and hospitality of the employees and their ability to create trust and confidence, courtesy and trustworthiness that of the staff, and free from danger, risk or doubt. In addition, it is also required well-planned programs, and at the same time several important provisions in providing health services to the public, so that both service providers or recipients are equally benefited. So that, health care team (multidiscipline) should discuss together about innovation of their field according to develop an ideal collaborative relationship across culture in holistic health care framework.

We do hope that this conference can answer the challenge. Finally, we welcome you, our respected guests and participants, in Semarang, Indonesia and enjoy the conference.

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PATTERN OF COMPLEMENTARY THERAPY USED BY PATIENTS IN DIABETES CARE REGIMENT

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ABSTRACT

Background: *Diabetes is chronic health problem which couldnt be cured. Use of medical therapy in a long term need huge budget and increase risk of adverse effect. Complementary/ alternative medicine (CAM) is a choice for patient in diabetes care management beside conventional medical therapy. Some of CAM were'nt have enough evidence based support respect to its benefit and adverse effect.*

Objective: *Aim of the study was to explore pattern of use of CAM by diabetic patient.*

Methods: *The study used qualitative descriptive phenomenology method and data collected by in-depth interview. Participants were 4 diabetic patient and 2 of diabetic patient family member who used CAM.*

Result: *Diabetes patients perceive complementary therapy as an effort to manage disease, complement to other diabetes care regiments, and substitutes or complements of medical drugs therapy. Reasons of use of complementary therapy were low cost, practical, and effective therapeutic impact. CAMs used by diabetes patient were herbs, animal, supplement diet, pray, and massage. Sources of information of CAM were families, friends, and traditional healer. Herbs ingredients were boiled, applied with hot water, made like a coffee, or cooked like salads/ vedgetables. Impact of complementary therapy used faced by diabetic patient were both beneficial and detrimental.*

Discussion: *Study findings congruent with other studies. Diabetes patient manage CAM administration by themself and no consultation with health professionals that may harmful for them eventhough they only experience minor side effect. Its need further study to find conclusive CAM effectivity and safety.*

Conclutions: *The study findings consist of diabetes patient perception about CAM, reasons of CAM uses, how to uses CAM, and impact felt after CAM uses. Use of complementary therapy need to be consulted with health professionals to help diabetic patient consider its adverse effects and beneficials.*

Keywords : *Diabetes, Complementary/ Alternative Medicine (CAM)*

BACKGROUND

Diabetes is a chronic condition that is a growing concern. The prevalence of diabetic patients in the world is high and tend to increase and become national epidemic threat in Indonesia because of high and increasing prevalence of the patients (WHO, 2011). Diabetes patients spread across all regions with some provinces have higher above national prevalence rate is 1.1%, including Central Java, which reached 1.3% (Research and Development Body of Indonesian MoH, 2008). In Semarang Diabetes case also tend to be high and is ranked 2nd of non-communicable diseases as hypertension in the period between 2008-2012 (Semarang City Health Office, 2013).

Diabetes can not be cured and may cause irreversible abnormalities. Diabetes is the originator of neuropathy and retinopathy which causes blindness, besides the residual symptoms of depression that often occurs in chronic health conditions (Davidson & Meltzer-Brody, 1999 in Anderson & Mc Farlane, 2004).

The goal of treatment in chronic health conditions like Diabetes not to heal but only control the symptoms. This is due to the lack of technology that can be applied for healing program (Anderson & Mc Farlane 2004). Diabetic patients must receive chronic condition in itself will last a lifetime.

Diabetic patient should modify lifestyle related to diet, physical activity and medication program. Continues diet restriction and drug consumption cause boredom, depression (Isworo, 2008), financial reduction because they have to allocate budget for drugs (NIDDK, 2011; Andayani, 2006) as well as face the possibility of side effects of drugs, such as oral hypoglycemic drugs include nausea or less appetite, sometimes causing edema in the legs, as well as frequent flatulence (Kariadi, 2009).

Care management complexity and impact of the diabetes causes patient choose complementary alternative medicine (CAM) as part of their management of care. Many people with diabetes use or practice CAM as supplement or replacement of conventional therapy. Studies found that 5.1 % diabetes patient were attending CAM practitioner in Australia (Yen et al (2013), and 63% use CAM in India (Bhalerao et al, 2013). Utilization of CAM among Indonesian people is also quite high (CBS, 2012).

Utilization of CAM have a positive and negative impact on patients with diabetes. Study by Taylor (2009) suggests that the practice of yoga in patients with diabetes beneficial because it improves physical fitness, physical and mental relaxation, stress tolerance, self-awareness, coping skills, social support, as well as a feeling of well-being. Research shows eucalyptus supplement in patients with diabetes are not effective in helping control blood sugar, otherwise eucalyptus supplementation can cause or worsen liver disease in people who are sensitive. Researchs on other CAM materials used by diabetic patients also indicate negative impact (NCCAM, 2008).

OBJECTIVE

The study was conducted to investigate pattern of CAMs used by diabetic patient.

METHODS

This qualitative study utilised phenomenological approach. The participants were 4 diabetic patient and 2 family member of diabetic patient in Puduk Payung and Padangsari Village Banyumanik District of Semarang, Indonesia. The inclusion criteria of participants were able to communicate verbally and understand Indonesian, had been at least 2 years diagnosed with diabetes and use of complementary therapies in the treatment of diabetes.

RESULTS

Results of the study identified four themes consist of perception of diabetic patient to CAM utilities, reasons to use CAM, how to use CAM, and impact felt after CAM use.

Theme 1. Perception of CAM utilities

Participants perceive CAM as a complement to medical drug therapy, substitute medical drugs, complementary therapy in addition to other diabetes regimens, as well as the effort or endeavor to cure. Participant also state that one specific herbs is fit to one specific people. Examples of participant statements as follows:

"... we didnt continue (medical drug therapy), than we just started use herbs, ..." (P6)

"... long time ago when he (husband) consume drugs he didnt drink herbs, but now he consume drugs regularly, he just drinks herbs as supplement when his body was not fit ... "(P6)

"... drugs, both medical or herbs are just supplemental, the most important is food and drinks must be restricted, ... what we look for ... drugs (herbs or medical) is an effort ... hope I'll had long life, we tried but that there has been decisive, it must be ready ... but we must try, we do not despair ... "(P2)

" ... people were not same (in accepting herbs) one herb may fit to one diabetic patient, otherwise may not ... "(P1)

Theme 2 Reasons to use CAM

Some of reasons of CAM used by participants were low cost, practical, and less or even no side effects, and more effective result compared to medical drugs. Examples of participant statements concerning the utilization of CAM as follows:

"... clearly, herbs was lower cost compared to medical drugs regiment..." (P6)

"... when the (medical) drugs is depleted the symptoms is come, than i ask my traditional healer, when its healed, its enough, until long time ... now is about a year i didnt come to my traditional healer.." (P3)

Theme 3 How to use CAM

The phenomenon of how participants use CAM identified in this study include the type of utilized CAMs, source of information about, sources of materials, how to process materials, as well as how to use or consume it.

Complementary therapies which used or made by the participants in the study include herbs, animal, prayer, diet supplements and massage. Herbs used by participants include bitter melon (*Momordica charantia*), "mahoni" seeds, "ciplukan" (roots, stems, leaves), Heartleaf (*Boussingaultia basseloides*), "dandang gendhis", avocado seed, "sambung nyowo", "mahkota dewa" (*Phaleria macrocarpa*), cinnamon, bay leaves, tailings leaf, dull leaves, "kenci-kencian" leaves, mangosteen (*Garcinia mangostana*), "insulin" leaf, "mlanding jowo", "ketul" leaves, "meniran" leaf, "sambiloto" (*Andrographis paniculata*) and "temulawak" (*Curcuma xanthorrhiza*). Animal which used as therapy by participant was "undur-undur". Examples of participant statements about the type of used or performed CAM are as follows:

"... herbs we used were cinnamon, bay leaves, tailings leaves, loaves leaf ..." (P6)

" ... the traditional healer massage my head around eyes, he said it performed to prevent blindness among diabetic patient ... " (P3)

" ... i also ever tried "undur-undur" ... (P4)

Sources of information about CAM used or carried by participants ranged from relatives, fellow sufferers of or non-diabetic patients, neighbors, traditional healer and also mass media. Participant arrange the use of herbs by them self and family, they did not consult it with health professionals because they doubtfully if they competent about it and being open to discuss it or not. Examples of participant statements are as follows:

"... my sister said it doesnt need expensive drug to cure diabetese, its simple, just consume ... "mahoni" seeds, which already dry, fallen, just only once a day ... "(P6)

" i didnt (communicate the use of herbs to the doctor), i worry it becomes mistakes, its my own beliefs that herbs were natural ... " (P1)

How to obtain material for CAM i.e herbs and animal used or made by the participants is to be given by the family, take it directly from environment around home as well as by buying it. Examples of statements of participants about how to obtain materials for complementary therapies are as follows:

"... we had try "binahong" and "ciplukan" leaves, "dhandhang gendhis" ... there they are on the ground (pointing plants on the front porch of the house) ... we also plant "Sambiloto" ... "(P1)

How to cultivate herbs for therapy made by participants include boiled, cooked as vegetables, and brewed, for example the following statements:

"... "ketul" leaves, cooked like vedgetables ("sayur bening, gubahan, bobor") ..."(P6)

Participant consume herbs or animal by drink or swoll directly once or twice a day regularly or when complaining symptoms and stop when they bored, the body was fit, or they receive information about new herbs that they were interested to try. Examples of participants statements about how to use or consume herbs or animal herbs as follows:

" ... when i still feel the symptoms i continue to drink (herb) when it decrease i stop ... " (P2)

" ... ("Binahong") was boiled seven, nine, or eleven leaves, two cup (\pm 250 ml) converted to a cup, than drank in the morning and afternoon, ("mahoni" seeds) were swollen directly, its so bitter ... " (P1)

Theme 4 The impact felt after CAM use

CAM used impact felt by the participants both positive and negative. Positive impacts include increasing the perceived general health and lower blood sugar. While the perceived negative impact include sleeplessness and fatigue. Examples of participant statements as follows:

"... it was when my husband get worst six hundred and fifty (blood sugar level) ... he drank "mlandhing jowo" once a day for a week, than become ... three hundred, and than a month after ... its about two hundred and fiveteen, after that his body was already fit ... we have ever gifted herbs by some Dukun, but my husband got malaises, his condition become down, so i put it off "(P5)

" ... (after drink "sambung nyowo") my body was fitter but i cant sleep, so i stop it ... " (P1)

DISCUSSION

Participants in this study perceived CAM both as complementary or alternative to diabetes conventional medicine. Lui, Dower, Donald, Coll (2012) study found that people with diabetes in Australia use CAM as a supplement rather than a replacement of biomedicine regimen. Study in Lebanon also found that diabetes patient who use CAM as complementary is more than alternative regiment (79,1:20,9 %) (Naja et al. 2014). Utilization of CAM as a supplement that is used in conjunction with medical drug therapy should be done cautiously because its potential adverse effect especially hypoglycemia (Birdee & Yeh, 2010).

Participant stated that medical drugs and herbs is only enhancer, what primarily must be considered in the treatment of diabetes is restricted diet. This finding consistent with the study of Niswah, Chinnawong, Manasurakarn, (2014) which found that diabetes patient still perform other regiment beside consume herbs consist of diet 40,3 % and exercise 29,9 %. Non-pharmacological treatment includes lifestyle changes in diet, increase physical activity and education for patients is the first priority in the management of patients with diabetes before pharmacologic therapy, Oral hypoglycemic drugs is recommended for people with diabetes who can not control their blood sugar with non-pharmacological management (Yunir and Soebardi in Sudoyo, et al., 2006; Kartini, 2009).

Reasons of CAM use among participants in this study were lower cost, practical, and less or even no side effects, and more effective result compared to medical drugs. This findings is congruent with several studies which found the same reasons or beliefs of CAM use among diabetes patient (Ching, Zakaria, Paimin, Jalalian, 2013; Chang, Wallis, Tiralongo, 2010; Naja et al. 2014; Niswah, Chinnawong, Manasurakarn, (2014). The average cost of the health of people with diabetes in the US was 2.3-fold compared to people without diabetes (NIDDK, 2011). While in Indonesia the average of total treatment cost per patient is Rp 208 500 (\pm US \$ 16) per month with largest funding allocation to cost of drug (59.5%) and complications management (31%) (Andayani, 2006). One of participants stated that her traditional healer didnt specify the cost for treatment, its depend on her amount of money, some times she just only pay about Rp 40.000 (\pm US \$ 3) per visit, its less than cost for a GP visit. Also most of herbs materials for CAM is available around home environment so CAM for participants is more cost effective and practical.

Participants considers medical drug therapy for diabetes have side effects that can have a negative impact, while CAM i.e herbs have less or even no side effects. Adverse effects of oral hypoglycemic drugs include hypoglycemia, nausea or decreased appetite,

sometimes resulting in legs edema, as well as frequent flatulence (Kartini, 2009). According to Ardiyanto (2014) consumption of potent, herbs or other natural materials will cause a reaction that includes a variety of *healing crisis, aggravation, and amelioration*, so its still need consideration by the patient.

All of participants use herbs in their regiment and only one who use animal. This finding is congruent with other studies which found that herbs is the most common CAM used by diabetic patient (Ching, Zakaria, Paimin, Jalalian, 2013; Niswah, Chinnawong, Manasurakarn, (2014); Chang, Wallis, Tiralongo, 2010; Naja et al. 2014). Extract of bitter lowering blood glucose levels in type 1 diabetic rats potently with the mechanism of antioxidant activity of flavonoids active compounds which can prevent Langerhans b cell of the pancreas damage and complications due to diabetes. Extract of bitter leaf and andrografolid active compound also potently lowers blood glucose levels in insulin-resistant diabetes mellitus type mice through increasing glucose carrier protein in the network (GLUT-4) and reduce levels of LDL lipid components and triglycerides in the blood that can lead to insulin-resistant conditions. Another mechanism is through inhibition of the enzyme alpha-amylase and alpha-glucosidase which plays a role in glucose absorption in the gastrointestinal tract (Ardiyanto, 2014). Wide studies of the effectivity and safety of the use of herbs among diabetes patient is inconsistent (Medagama & Bandara, 2014), so its need further conclusive study.

Other CAMs used or practiced by the participants in the study were pray, diet supplements and massage. The use of pray among participants in this study is consistent with other studies that people with diabetes using multiple tools and practices as religious or spiritual coping with the disease, by prayer, meditation, talking to God, as well as reading the scriptures (Niswah, Chinnawong, Manasurakarn, (2014); Daaleman, et al. 2001; Samuel-Hodge , et al., 2000; in Lager, 2006). Spiritual welfare lowering diseases related uncertainty and issues related to the lives of people with diabetes and mediate relationship between uncertainty with psychosocial adjustment (Landis, 1996; in Lager 2006). King et al, 2002; in Lager (2006) also found that the presence of religious activities become predictor of low C-reactive protein (CRP) level, people with diabetes who do not follow religious activities in churches or places of religious activity were found to have higher CRP levels. Based on this positive impact of spiritual practices towards improving the welfare of people with diabetes spirituality need fulfilment among people with diabetes should be encouraged.

Participants receive information about CAM from relatives, fellow sufferers of or non-diabetic patients, neighbors and traditional healer. This finding is congruent with studies on source of information about CAM for diabetes patient (Niswah, Chinnawong, Manasurakarn, (2014); Chang, Wallis, Tiralongo, 2010), except there were no participants in this study who receive information from health professionals. Participants arrange the use of herbs by them self and family, they did not consult it with health professionals because they doubtfully if they were competent and would be open to discuss. This is similar with other study of Naja et al. (2014) that found 121 (93,1 %) of 130 diabetes patients in Lebanon didnt consult with a doctor before using CAMs. This arrangement patter of CAM use may increase self management but on health professional source of information may lead to lack of recommended evidence based CAMs for diabetes patient. Helping patient to make decision about the most safe and effective CAMs, despite the unclear and growing research of it should be done by physician (Birdee & Yeh, 2010), and other health professionals.

Material for CAMs i.e herbs used or made by the participants was obtained from their family given, take it directly from plants around home, as well as by buying. This was similar

with Niswah, Chinnawong, Manasurakarn, (2014) finding study that sources of CAM product were came from environment around, markets, friends and also family member. Participants in this study cultivate herbs for therapy by boiling, cooking as vegetables, and brewed. They consume herbs by drinking or swelling directly once or twice a day regularly or when complaining symptoms and stop when they bored, the body was fit, or they receive information about new herbs that they were interested to try. Participant used herbs interchangeably, when they gone bored or wish to try new herb than they just change the herb. This finding congruent with the study of Naja et al. (2014) which found that 63,8 % diabetes patient is trying CAM for the sake of experiment. This behaviour may lead to confusing conclusion about which herb effective and safe for diabetes patient.

CAM used impact felt by the participants both positive and negative. Positive impacts include increasing the perceived general health and lower blood sugar. While the perceived negative impact include sleeplessness and fatigue. Participants experience good subjective impact with least side effect by consuming herbs for managing diabetes. This findings is similar with those done by Naja et al. (2014) who found that 47,2 % have feeling of body strengthening and only 10,2 % of diabetes patient who report having side effect after CAM used including feeling of rise of several symptoms (4,7%).

CONCLUSIONS

Diabetes patient perceived CAM as both complementary or altenative to medical drugs and other diabetes regiment. Reasons of CAM uses were low cost, practical, and effective therapeutic impact. CAMs used by diabetes patient were herbs, animal, supplement diet, pray, and massage. Sources of information of CAM were families, friends, and traditional healer. Herbs ingredients were boiled, applied with hot water, made like a coffee, or cooked like salads/ vedgetables. Impact of complementary therapy used faced by diabetic patient were both beneficial and detrimental. Diabetes patient should be open and discuss the use of CAM to health professionals to be observed the positive or negative impact. Further research on the phenomenon of the use of complementary therapies in the treatment regimens of diabetes needs to be done especially in relation to the effective CAM for the treatment of diabetes and the use of CAM for the treatment of diabetes from the perspective of complementary therapy practitioners and health professionals.

REFERENCES

- Andayani, TM 2006. Cost Analysis of Diabetes Mellitus Treatment in Hospital Dr. Sardjito. Indonesian pharmaceutical magazines, 17 (3), 130-135, 2006
- Anderson, ET, Mc Farlane, J., 2004 *Community as Partner, Theory and Practice in Nursing* 4th ed. Philadelphia: Lippincott William & Wilkins
- Ardianto, D (2014) Herbs Therapy for Diabetes. National Seminar : The Prospect of Herbs Therapy For Diabetes; November 2nd 2014
- Bhalerao, MS, Bolshete, PM, Swar, BD, Bangera, TA, Kolhe, VR, Tambe, MJ, Wade, MP, Bhowate, SD, Sonje, UB, Gogtay, NJ, Thatte, UM, 2013. *Use of and Satisfaction with Complementary and Alternative Medicine in Four Chronic Disease: A Cross-sectional Study from India. The National Medical Journal of India.* Vol. 26, No. 2, 2013.

- Birdee, GS; Yeh, G (2010) Complementary and Alternative Medicine Therapies for Diabetes : A Clinical Review. *Journal of Clinical Diabetes* Volume 28 No 4
- Central Bureau of Statistic (CBS), 2012 Health Indicators 1995 to 2012, http://www.bps.go.id/tab_sub/view.php?kat=1&tabel=1&daftar=1&id_subyek=30&n_otab=33 2012
- Chang, HA; Wallis, M; Tiralongo, E (2011) Use of Complementary and Alternative Medicine Among People with Type 2 Diabetes in Taiwan: A Cross-Sectional Survey. *Journal of Evidence-Based Complementary and Alternative Medicine*
- Ching, SM; Zakaria, ZA; Paimin, F; Jalalian, M (2013) Complementary Alternative Medicine Use Among Patients with Type 2 Diabetes Mellitus in THE Primary Care Setting : a Cross Sectional Study in Malaysia. *BMC Complementary and Alternative Medicine* 13:148
- Isworo, A., 2008. Relationship of Depression and Family Support with Blood Sugar Level In Type 2 Diabetes Mellitus Patients in hospitals of Sragen. Theses: FIK UI
- Kariadi, SHKS., 2009. Diabetes? No Need To Worry !!. Complete guide to diabetes for patient, family, and Medical Professionals. Bandung: Mizan Media Library.
- Lager, JM (2006) Relationship among Religious Coping, Pasychosocial Factors, and Quality of Life in Individuals with Type 2 Diabetes. <http://oaktrust.library.tamu.edu/bitstream/handle/1969.1/ETD-TAMU-1797/LAGER-DISSERTATION.pdf>
- Lui, C; Dower, J; Donald, M; Coll, JR (2012) Patterns and Determinants of Complementary and Alternative Medicine Practitioner Use among Adults with Diabetes in Queensland, Australia. *Evidence-Based Complementary and Alternative Medicine*.
- Medagama, AB; Bandara, R (2014) The Use of Complementary and Alternative Medicine (CAMs) in The Treatment of Diabetes Mellitus: Is Continued Use Safe and Effective?. www.nutritionj.com/content/13/1/102
- Naja, F; Mousa, D; Alameddin, M; Shoaib, H; Itani, L; Mourad, Y (2014) Prevalence and Correlates of Complementary and Alternative Medicine Use Among Diabetic Patients in Beirut, Lebanon: A Cross-sectional Study. *BMC Complementary and Alternative Medicine*. 14:185
- National Institute of Diabetes and Digestive and Kidney Disease. (NIDDK), 2011 National Diabetes Statistics. <http://diabetes.niddk.nih.gov/dm/pubs/statistics/>
- NCCAM., 2013. *Diabetes and Dietary Supplements* <http://nccam.nih.gov/health/diabetes/supplements>
- Niswah, Chinnawong, T; Manasurakarn, J (2014) Complementary Therapies used Among Adult Patients with Type 2 Diabetes Mellitus in Aceh, Indonesia. *Nurse Media Journal of Nursing* Vol 4 No 1
- Research and Development Body of Indonesian Ministry of Health., 2008. Basic Health Research Report 2007. MOH: Jakarta

Semarang City Health Office., 2013. Health Profile of Semarang. Semarang: Semarang City Health Office

Sudoyo et al., 2006. Textbooks internal medicine, vol III IV edition. Jakarta: Central Publishing Department of Medicine Faculty of Medicine UI

Taylor, MR, 2009. *Yoga and Diabetes Self Management: The Mind-Body Connection*. School of Nursing: University of Washington. Dissertation

WHO., 2011. Prevalence of Diabetes Mellitus.
http://www.who.int/diabetes/facts/world_figures/en/index5.html

Yen, L; Jowsey, T; McRae, IS (2013) Consultation with Complementary and Alternative Medicine Practitioners by Older Australian: Result from National Survey. BMC Complementary and Alternative Medicine. 13:73