

Nutrition Requirements of Pregnant and Breastfeeding Women

Includes:
Brochure
Information handout

By Rabia Ishaq, Cara Rankin, and Stephanie Wood

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Supervising Professor: Prof. Irene Swinson, Trent University

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RUNNING HEAD: Reflective Practice on the Student

Reflective Practice on the Student Enlightenment of Midwifery

Stephanie Wood

Trent University

Look Back

From the first meeting with Carolyn Archbold of the Kawartha Community Midwives, I came to realize how much benefit there is for the Kawartha community having the service of these care givers and what their scope of practice entails.

Elaborate

During the first meeting, Cara Rankin and I were able to learn about the service that the Kawartha Community Midwives provides, their scope of practice and their role as a part of the health care team. Midwives ease the patient load of obstetric doctors by taking on their own case loads and can provide more comfort to women during pregnancy and labor as most midwives are women and have been through this process themselves. The Kawartha Midwives have a large base of clients as they service the Kawartha Community which reaches up to Lindsay and Apsley, down to Millbrook and over to Havelock. This large area around Peterborough includes a fair sized menonite community near Lindsay who would have a great need for the midwives as they could stay at home and deliver their children. It is also a great service to have this group in the Kawartha area as there are only a couple of major hospitals within the area in the area that could provide pregnancy and delivery care.

Analyze

Midwifery is an alternate service that can be used for women to deliver their child either in a hospital or the comfort of their own home. This type of service can also be of great benefit to those who may have difficulty getting to a hospital or care facility to deliver their child due to the winter conditions around the area or their lack of transportation available to them. Midwives have been around for a very long time. It has

been within the last 50 or so years that the majority of pregnant women have been giving birth in hospitals and not their homes (Jackson & Bailes, 1995). Over time family sizes have become smaller and so women wanted reassurance that their children would be healthy and safe during and after the birth. The idea that it is safer to give birth in a hospital with physician attending to the care came from the obstetricians who wanted midwifery to be banned (Jackson & Bailes, 1995). As time has gone on, we are now moving back to including midwives as a part of the regular health care team in pregnancy, labor, and delivery. Not only are midwives involved in the prenatal care and delivery, they are taking on the post natal care and family health as well.

Revise

It is important to remember that there are many components to health care and a community. Not all of the people that may be included as a part of the health care team provide services or are professions that are well known. Even though certain health practices and professions are not well known, they hold an important role in the care for the community.

New Perspective

This experience has shown that there is so much more to health care than is known. There are many different forms of alternative therapies and services that people may not be aware of. Nursing courses that we take do give an overview of the different sorts of discipline's out there but does not go into lengthy amounts of detail. This community project has taught how there can be many services out there that may not be fully acknowledged or are just coming to be accepted as a regular practice and how crucial a component they can be in the community's well being.

Reference:

Jackson, M. E., & Bailes, A. J., (1995) Home birth with certified nurse-midwife attendants in the united states: An overview. *American College of Nurse-Midwives*, 40(6), 493-507.

Reflective Practice

Name: Rabia Ishaq.

Student No.: 0138846.

Course: NURS 302H.

Clinical Instructor: Irene Swinson.

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Look Back

A recent meaningful situation in my nursing practice as a student nurse occurred when I was told that I will be doing my community nursing placement at the Trent Center for Community Based Education, specifically carrying out research for the Kawartha Community Midwives.

Elaborate and Describe

On January 15, 2007 I started my community nursing placement at the Trent Center for Community Based Education (TCCBE) in Peterborough. On the morning of the orientation, I decided to work on research project for the Kawartha Community Midwives (KCM). The supervisor at the TCCBE office informed us (me and two other nursing students) that the host agency is interested in a nutrition fact sheet for pregnant and breastfeeding mothers. Despite the fact that I choose the project, I was extremely nervous about conducting this research for the Midwives office. My anxiety was obvious because I did not know much about the practice of midwifery in Canada and hence, it was difficult for me to start my research without further knowledge about the host agencies scope of practice.

Analysis of the Outcome

The above situations encouraged me to lookup and analyze literature on the practice on midwifery in Canada. Literature review reveals that until recently, Canada was the only industrial nation in the world that did not have midwifery legislation in place (Harris, 1999, p. 4). As health care in most of Canada falls under provincial jurisdiction, the legal status of midwifery varies from province to province (Harris, 1999, p. 4). In 1993 under the 1991 *Health Regulated Professions Act*, Ontario became the first province in Canada to recognize midwifery as an autonomous profession, funded and regulated by the Ontario Ministry of Health and Long-Term Care (Harris, 1999, p. 4). The College of Midwives of Ontario is the regulatory body for

midwifery graduates in Ontario (Collage of Midwives of Ontario, 2007). The College generates its definition of the scope of practice for midwifery from the *Midwifery Act, 1991* (Collage of Midwives of Ontario, 2007).

"The practice of midwifery is the assessment and monitoring of women during pregnancy, labour, and the post-partum period and of their newborn babies, the provision of care during normal pregnancy, labour, and post-partum period, and the conducting of spontaneous normal vaginal deliveries" (Collage of Midwives of Ontario, 2007).

Midwifery education in Ontario is four year university based undergraduate degree, which prepares midwives academically while also requiring that each midwife, during the course of her training, attends at least 60 births out of which the midwife must be the primary caregiver for at least 40 (Collage of Midwives of Ontario, 2007). The Ontario model of midwifery is based on three principles (Association of Ontario Midwives, 2007):

- *Continuity of Care:* Midwifery care is available to women throughout their pregnancy, labour, birth, and the first six weeks after birth.
- *Informed Choice:* Women are active decision-makers in the care they receive; midwives give information to help women make informed decisions.
- *Choice of Birthplace:* Midwifery clients may choose to give birth at home or in hospital.

Hence, the midwives provide safe, personalized, research-based care for women at hospital or home and are on-call for their clients 24 hours a day during the course of care.

Revise the Approach

The research also indicates that the history of Canadian midwifery is complex. Until the 19th century, midwifery was practiced without the regulation of laws or professional organizations (Bourgeault, 2000, p. 172). The profession of midwifery in Canada began to formally develop in the 1960s and 1970s (Bourgeault, 2000, p. 183). Many midwives at that time began practicing as assistants to physicians who attended home births (Bourgeault, 2000, p. 183). Midwives would attend the home birth to coach the woman through the labour, offer advice and reassurance, and provide comforting measures such as, massage (Bourgeault, 2000, p. 183).

Midwives later began to move into their own clinics, practicing independently of the physicians, providing prenatal and postnatal care and education for the women they assisted and their babies after birth (Bourgeault, 2000, p. 183). Based on the information available on the KCM website and the article provided by National Aboriginal Health Organization, the care given by midwives now includes; preventative measures, the detection of abnormal conditions in mother and child, the acquisition of medical assistance, and the execution of emergency measures in the absence of medical help (National Aboriginal Health Organization, 2004, p. 9 and Kawartha Community Midwives, 2001). Midwives also play a role in maternal, family, and community education (Kawartha Community Midwives, 2001). They work in group practices of two or more registered midwives and are paid by the provincial government (Kawartha Community Midwives, 2001). There must be at least two midwives attending each client's birth (Kawartha Community Midwives, 2001).

New Perspective

I now understand that midwives in Canada have worked extremely hard to gain recognition for their work and to become more accepted. These registered health care professionals work in partnership with women to give the necessary support, care and advice during pregnancy, labour and the postpartum period, to conduct births and to provide care for the newborns (National Aboriginal Health Organization, 2004, p. 9). This care includes preventative measures, detection of complications in mother and child, accessing medical care or other appropriate assistance and carrying out emergency measures if needed (National Aboriginal Health Organization, 2004, p. 10). All in all, midwives are responsible and accountable members of the health care system and their services and expertise are of utmost importance to different members of the health care profession.

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Pregnancy, Nutrition & You

Adequate nutrition during pregnancy is essential for optimal fetal growth and development. The physiological changes that occur in pregnancy and preparation for lactation require extra nutrients and energy.

Recommended daily allowance (RDA) is expressed in micrograms per day (µg/d) or grams per day (g/d)

Nutrients	Function	RDA	Best Food Sources
Proteins	Cell growth and blood production	60 g/d	Lean meat, fish, poultry, egg whites, beans, peanut butter, tofu
Carbohydrates	Daily energy production and to maintain appropriate blood glucose level	175 g/d	Breads, cereals, rice, potatoes, pasta, fruits, vegetables
Essential Fatty Acids	Body energy stores and for proper neural and visual development in the fetus.	Linoleic acid: 13 g/d. α-linolenic acid: 1.4 g/d.	Nuts, margarine, vegetable oils (ex. Sunflower), grains, seeds
Folate / Folic Acid	Supports blood and protein production, effective enzyme function and decreases the risk of neural tube defects in the fetus.	400µg/d - 600µg/d	Green leafy vegetables, dark yellow fruits and vegetables (oranges and corn), beans, peas, nuts
Iron	Red blood cell production	1st trimester: 13mg 2nd trimester: 18mg 3rd trimester: 23mg	Lean red meat, spinach, iron-fortified whole-grain breads and cereals
Calcium	For strong bones and teeth, muscle contraction and nerve function	1200 - 1500 mg/d	Milk, cheese, yogurt, sardines or salmon with bones, calcium-fortified beverages
Vitamin A	For healthy skin, good eyesight and to support growing bones.	750 -770 µg/d	Carrots, dark leafy greens, sweet potatoes
Vitamin C	For healthy gums, teeth, and bones. Assists with iron absorption. Boosts immune system.	70 - 80 mg/d	Citrus fruit, broccoli, tomatoes, cauliflower, parsley, fortified fruit juices
Vitamin D	For healthy bones and teeth; aids in the absorption of calcium.	5.0 µg/d	Fortified milk, dairy products, cereals, and breads, canned salmon and tuna
Vitamin B6	Formation of red blood cells, proteins, fats and carbohydrates.	1.9 – 2.0 mg/d	Pork, ham, whole-grain cereals, green leafy vegetables, prunes, bananas,
Vitamin B12	Formation of red blood cells and maintenance of nervous system health.	2.2 – 2.6 µg/d	Meat, fish, poultry, milk, eggs, cottage cheese (Note: vegetarians who don't eat dairy products need supplemental B12)
Zinc	Necessary for normal growth and development of the fetus and the placenta. Has beneficial effect on neonatal immune status.	11-15 mg/d	Dairy products, dark meats, beans and lentils, yeast, nuts, seeds (ex. Pumpkin), wholegrain cereals
Iodine	Prevents hypothyroidism, which results in irreversible mental, neurological and developmental dysfunction.	220 µg/d	Seafood, seaweed (ex. kelp and nori), eggs, meat, dairy products, iodized salt

Following a healthy eating pattern via the guidelines set by Canada's Food Guide to Healthy Eating is the preferred way to meet nutrient requirements during pregnancy. However, when nutrient intake is insufficient, supplementation is required. Your health care provider can do a personal diet analysis which will highlight the areas of nutritional importance specifically for you.

Supplementation Facts

- Folic acid is not found in day to day diet and must be taken by synthetic supplement
- A mother's calcium stores become depleted during pregnancy as the fetus acquires it's calcium from the mother.
- Spending 15-30 minutes in the sun while wearing light clothing will prevent vitamin D deficiency. During the winter season, a supplement is recommended.
- Haemoglobin levels should be tested in a pregnant mother before taking an iron supplement to ensure proper dosing.
- Always consult your health care provider before beginning any supplements.

All herbal products such as, teas and supplements require further investigation. Some have been shown to have adverse effects. These include chamomile, black/blue cohosh, castor oil and feverfew. Other herbal products such as red raspberry leaf should be used with caution. Ask your health care provider about the use of herbal products before, during and after pregnancy.

Mercury and Fish Consumption

Pregnant and nursing women must be aware of the risks of consuming fish and fish products due to their dangerous chemical levels such as mercury, PCB's and dioxins. These chemicals may pass through breast milk and blood, which can cause harm to the developing fetus.

- Fish to avoid or consume less than once per month: Shark, swordfish, tile fish, frozen/fresh tuna, canned white albacore tuna, farmed salmon, fish oil supplements.
- Better fish choices low in mercury which can be consumed twice per week include: trout, tilapia, herrings, sardines, canned wild salmon, wild Chinook salmon (not farmed), oyster(wild) and pollock.
- Light canned tuna has low levels of mercury and pregnant and nursing mothers are advised to limit their consumption to 1 can per week.

*If you eat fish from local rivers and lakes it is recommended you consult the Ministry of the environments guide to eating Ontario sport fish: <http://www.ene.gov.on.ca/envision/guide/>

Food Safety

Safe handling and preparation of food includes frequent hand washing, clean utensils, chopping boards and counter tops can prevent food borne infections.

All vegetables and fruits should be washed thoroughly prior to eating.

Avoid consumption of any raw or undercooked meats, undercooked eggs, unpasteurized foods, raw sprouts and pates.

These products may contain harmful bacteria or viruses such as listeria, toxoplasmosis, salmonella, and e. coli.

Listeria - is found in unpasteurized products such as, apple cider, soft cheeses, deli meats and undercooked hotdogs. Check all labels for pasteurization information.

Toxoplasmosis – most commonly found in cat feces. Pregnant women should not clean kitty litter boxes.

Women should also avoid contact with soil which may contain cat feces such as gardens and flower beds. Toxoplasmosis also can be found in undercooked meats, or unwashed vegetables and fruit.

Community Resources

Economical Food Sources

- Collective Kitchens (Contact the Peterborough for more Health Unit for more information)
705- 743-1000 ext. 250
- Food Programs YWCA
705-743-3526
- Salvation Army Family Services
705-742-4391
- St. Vincent de Paul
705- 742-2585
- Peterborough Pregnancy & Support Services
705-742-4015

Organic and Supplement Resource Options

- The Earth Food Store
 - Peterborough
- Grocery Stores (ie. Sobey's, Loblaw's and A&P)
- Jo Anne's Health & Beauty
 - Peterborough and Lindsay
- Kelcey's Nutrition Center
 - Peterborough
- Nutrition House
 - Peterborough
- General Nutrition
 - Peterborough
- Harvest Moon Whole Foods
 - Bancroft
- Lakefield Pantry
 - Lakefield

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