SPRING 2017

DNIG

Diabetes Nursing Interest Group Newsletter

INSIDE THIS ISSUE:

Report from the Chair

By Lisa Herlehy

Hello to DNIG members across Ontario,

This is our first newsletter of the year and hopefully you will find it interesting and informative. I want to take this opportunity to thank all who participated in our survey in the fall. The results were reviewed at our AGM which was open to all members in early December and a summary is included. Your opinions have informed the discussion on policy directions for DNIG.

As I write this, RNAO's annual Queen's Park conference is taking place and we are happy to support our executive member for policy, Sanja Visekruna and student member Anissa Ramchatesingh as they attend this event. Look for their reflections in this newsletter. In this issue we also feature reviews from members who received support funding from DNIG for the annual CDA (now Diabetes Canada) conference in October. There are many pearls to be gleaned at conferences such as these so consider applying for funding in 2017 and then sharing your experience as they have. We also feature an article on breastfeeding and as always, notes from our student's corner.

We are currently looking at ways to help DNIG members stay connected through improved use of technology with consideration of a discussion forum/ website update. Stay tuned for more information in upcoming weeks.

As always, feel free to contact any member of your executive with questions/concerns/suggestions. There is always an open invitation for contributions to the newsletter in any area of diabetes that you are passionate about. Sometimes we do not realize the extent to which others can be informed and impassioned by what we have become experts in, both from experience and best practice perspectives.

Thanks for your participation in DNIG, we'll speak again in 2017!

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Did you know?

Canadian Diabetes Association (CDA) has officially changed it's name to Diabetes Canada?

DIABETES CANADA

'To focus more attention on the epidemic and rally Canadians in our fight against this disease, the Canadian Diabetes Association will be called **Diabetes Canada** as of February 13. We urgently need to achieve greater impact and by speaking with a stronger, clearer voice, Diabetes Canada will raise the profile of diabetes and bring more Canadians to our cause.

To begin this work and inspire more Canadians to take action, Diabetes Canada is launching **End Diabetes** on February 13 with a campaign that focuses on the physical and emotional realities of living with diabetes. End Diabetes is our new rallying cry to end the negative health impacts of diabetes, including its stigma, as well as lack of access to services and education. Going forward, you will see Diabetes Canada and End Diabetes in everything we do. They are the two engines to drive awareness, action and impact.'

For more information please check out their new website https://www.diabetes.ca/

CDA Conference Experience

By: Wendy Kelen

Dr. Ron Goldenberg, endocrinologist from the North York General Hospital spoke at the session "New Perspectives on Diabetic Ketoacidosis and its Etiology". Commenting that some providers are reluctance to prescribe SGLT2 inhibitors for people with type 2 diabetes because of the potential risk of DKA; in fact the rate of DKA of patients on SGLT2 inhibitor is rare at less than or equal to 0.1% of treated patients. Dr. Goldenberg spoke from his experience as member of an expert committee to look at case reports of DKA after SGLT2 inhibitor use in Canada. Of the 46 case reports reviewed the common precipitating factors were: Bariatric and other surgery, extensive exercise, low carbohydrate diets, excessive alcohol consumption, insulin omission or dose reduction and severe acute illness. SGLT2 inhibitor associated DKA can be prevented by coaching patients to avoid low carbohydrate diets, not omit their insulin and stop taking the SGLT2 inhibitors during acute illness while following usual sick day guidelines. As well, the medication should be held prior to colonoscopy and three days prior to surgery as it has a half life of 13 hours. All SGLT2 inhibitor treated patients should be reminded of the symptoms of DKA.

Taking a Stand Against Obesity and Its Effects: Three sessions

Family physician Denise Campbell-Scherer of Edmonton spoke about the tsunami of obesity and related comorbid disease. We "tickle" patients' feet with a monofilament but rarely talk about obesity. Her presentation focused on the 5As of Obesity Management. The first A - Ask for permission to discuss weight. Her advice was to work as a team and be careful and kind when discussing weight in order to improve individual health.

The presentation by Dr. Sean Wharton of Hamilton focused on the limitations of lifestyle modification strategies, which in his view require much comprehensive support and only achieve 5 – 10 % weight loss which is often short term. According to Dr. Wharton, the usual scenario is that most people gain 0.5 to 1 lb per year because our biological makeup "defends our highest weight." He commented, "as a species, we are designed to gain weight. Diet and exercise are beneficial for conditions such as Alzheimer's and diabetes, but are not very effective for maintaining weight loss.

He reviewed pharmacological therapies now available that help with weight loss such as Orlistat and the GLP-1 inhibitor Saxenda (aka Liraglutide for diabetes). The problem with Orlistat is loose stool and 14.4% of users report fecal urgency. In the USA, six new drugs approved or are under approval for weight loss, for example topiramate/phentermine combination medication.

Yoni Freedhof, MD and the author of the book The Diet Fix advocated that we need to Take a Stand against Obesity. Obesity and diabetes have been referred to as a modern day flood. Swimming lessons are not enough. We need sand bags to change the cultural norm of eating fast food and rewarding children with junk food. We need to stop the public private partnerships between health organizations (e.g. hospitals) and the food industry.

Sondra Sherman won the Diabetes Educator of the Year Award for her outstanding efforts and achievements as a registered dietitian at the Jewish General Hospital in Montreal. She has contributed to many books and publications is a CDA volunteer and is on the National Executive. She has been a member of Team Diabetes, completing three full marathons and walking 5 km with her 81 year old patient. She accepted her award with the heartfelt quote by Winston Churchill "We make a living by what we get, but we make a life by what we give." I thought, does that not ring true in all our work as diabetes educators? Thank you very much to the DNIG for supporting me in attending the CDA 2016 Professional Conference. The volunteers and staff did a wonderful job organizing the event.

Is Patient Engagement Achievable?

By: Carol A. DeMille RN, MN, CDE

October 26th to 29th I was honoured to attend the 19th Annual CDA/CSEM Professional Conference and Annual Meetings through the generous support of the Diabetes Nurse Interest Group (DNIG) of the RNAO. The robust program included renowned speakers sharing their knowledge on new research and changes within the world of diabetes care. After reviewing the multitude of learning opportunities to share with DNIG colleagues from the conference, I selected "Is Patient Engagement Achievable?" This presentation employed several presenters. Michelle Sorenson, a clinical psychologist and diabetes advocate discussed counseling strategies for health care providers (HCP) within the clinic setting. Two people living with diabetes shared personal stories, reflecting both the positive and challenging experiences in their diabetes journey. Bruce Perkins and Amish Parikh gave an update on a new patient engagement initiative in the Type 1 Diabetes (TD1) community.

Sorenson's presentation looked at how health care practitioners (HCP) can use patient self-management strategies to determine readiness for change in managing both TD1 and Type 2 Diabetes (TD2). She explained that both groups carry shame and struggle with stigma, but in different ways. Those with TD2 fear being judged and often feel ashamed about the disease progression, their eating habits and the need for oral hypoglycemics and/or insulin. Whereas, many who have been managing TD1 for years feel traumatized and have psychosocial issues, which are barriers to engaging in self-management. Online communities support self-education and empowerment for this population.

"Acceptance-based interventions", which focus on how individuals integrate physical and psychological aspects of DM daily, are gaining ground. A strength-based approach focuses on supporting positive attributes and self-righting capacities. Sorenson recommends that the HCP demonstrate confidence in patient strengths while teaching them to be resilient.

"Rebecca", a young woman diagnosed with TD1 26 years earlier told us that she vividly remembered what the physician told her at diagnosis: "there will be a cure in 10 years". She is still waiting. She shared her struggle to find a healthcare "community" with a flexible and respectful HCP. Feeling that she had "earned a voice", Rebecca expected an "equal partnership" in conversations about diabetes. Her determination to improve glucose control and optimize A1C levels in preparation for pregnancy sent a strong message about self-management and readiness for change. The audience felt her frustration as decisions about diabetes management during labour and delivery were made in isolation of the personal plan she had developed with her husband .

"Brent", a 20 year firefighter with a spotless work attendance felt broadsided by the TD2 diagnosis, which he received in a phone conversation with his physician. He struggled with this communication strategy when a follow-up appointment was unavailable for 10 days. Despite being ready for change, he felt frustrated by the role reversal, knowledge deficit, lack of tools, and inability to self-manage.

Perkins & Parikh shared their work on a new initiative - " Type 1 Diabetes Think Tank Network: A Unique Patient Engagement Initiative". In this approach, patient expertise in living with TD1 is recognized and valued equally with professional expertise. These insights are used to develop and deliver education and tools. Stories are told in meaningful ways through videos, art and comedy. To date, improved stakeholder communications and standard of care has occurred for the T1D community with empowered patients and mobilized mentor advocates. The result has been a consistent plan across Canada for achieving optimal health outcomes. One outcome to date is the development of a "Clinic Conversation Guide for Type 1 Diabetes". This document and more information on the initiative can be accessed at www.t1thinktank.com**.**

In summary, this presentation provided a three-prong approach on the topic of patient engagement for those living with TD1 and TD2. Sorenson highlighted the struggle and successes with acceptance through strength-based approaches. Hearing first hand from people living with diabetes helped the audience appreciate their lived experience, plus their struggle to be heard, included and respected. Perkins & Parikh's work on a new" Think Tank Initiative" for the T1D community provides food for thought. Perhaps stakeholders in other sectors will take those "lessons learned" to develop similar initiatives to support the exploding numbers of people with TD2 across the country who are struggling with this chronic condition.

"Is Sleep Deprivation a Contributor to Obesity and Type 2 Diabetes in Children?"

By: Holly Tschirhart Menezes, RN CDE

Dr. Jean-Phillippe Chaput, a Scientist at the CHEO Research Institute in Ottawa, made a strong case for health care providers to emphasize sleep as much as diet and physical activity as a modifiable risk factor for obesity and type 2 diabetes.

Current sleep recommendations for adults are 7-9 hours of sleep and 8-10 hours for school-aged children. Chronic lack of sleep has become a common problem in our society, with evidence showing that short sleep duration is playing a role in the rising numbers of obese children and adolescents.

Dr. Chaput presented data showing that adults who received less than 5 hours of sleep are 55% more likely to be obese. Children who receive less than 8 hours of sleep are 89% more likely to be obese. How does insufficient sleep lead to significant weight gain and contribute to the type 2 diabetes epidemic?

There is growing evidence to show that the main mediator of obesity is increased food consumption. According to Dr. Chaput, *"The more time we spend awake, the more time we spend eating"*. Several studies found that when sleep was restricted, individuals increased their amount of snacking; ate more meals; and had greater consumption of energy-dense foods that are high in sugar and fat. Lack of sleep leads to weight gain that preferentially deposits fat in the abdomen, which is a known metabolic risk factor. Research also found that insulin sensitivity is decreased when there is insufficient sleep, which increases the risk for individuals to develop type 2 diabetes.

Importantly, in addition to obesity and type 2 diabetes, lack of sleep in adolescence is also associated with other health and behavioural issues: cardiovascular disease; weaker immune systems; anxiety & depression, and poor academic performance, together with unhealthy behaviours such as alcohol consumption, poor diet, physical inactivity, and increased screen time.

Dr. Chaput is currently conducting research to better understand the clinical benefits of improving sleep quality and duration on body weight and insulin sensitivity. He shared several recommendations for health professionals to improve sleep hygiene in their patients:

#1: Include regular assessment of sleep and sleep quality at every clinic visit with your patients:

The Canadian Obesity Network endorses asking about sleep for weight management. The big 3 ques tions to ask: **duration, quality, and timing**.

#2: Recommend sleep to your patients!

There is minimal risk in encouraging your patients to receive the recommended amount of sleep for their age group. Increasing sleep will not lead to weight loss, but will help prevent future weight gain.

#3: Promote behaviours that improve sleep hygiene.

Encourage physical activity: only 9% of children and 15% of adults meet current physical activity guidelines, but we require physical fatigue to sleep well. While more research is needed to better understand the impact that exposure to screens from electronic devices has on sleep, limiting screen time before bed is encouraged. The blue light emitted from cellphone changes brain signals for sleep-inducing hormones. If screen time before bed is needed, mobile applications can be downloaded that reduce the blue light.

Student's Corner

By: Anissa Ramchatesingh, 3rd year BN Student, DNIG Student Representative

On February 23rd and 24th, I had the wonderful opportunity to attend the RNAO's 17th Annual Queen's Park Day. The DNIG's Political Action ENO, Sanja Visekruna, also attended and was so kind and patient as to orient me to the event, since it was my first time. It was nothing short of incredible to see registered nurses, nurse practitioners, and nursing students unite and lobby for improving the healthcare of Ontarians. Nurses of all ages and experience were eager to engage the MPP of their riding into productive discussions about changes that need to be made, such as implementing a national pharmacare program and raising the provincial minimum wage (all 8 RNAO Backgrounders can be found here).

It was a delight to hear Ontario's Premier Kathleen Wynne, RNAO's CEO Doris Grinspun and RNAO's President Carol Timmings speak about these issues. I was fortunate enough to meet these leaders, along with several nurses and students from various Interest Groups. We attended a debate in the Legislative Assembly of Ontario, and saw political leaders of the NDP, Conservative and Liberal parties deliberate and advocate for these health care priorities.

One of the highlights of the day was when Ontario's Health Minister, Eric Hoskins, said that he would fully support RNAO's initiative to publicly fund offloading devices for individuals with diabetes. I was so glad to hear that Ontario would soon be proactive in the prevention of pressure ulcers, rather than remaining in the reactive position of amputations. Another memorable moment was when he announced that another RNAO priority, fully utilizing RNs and NPs to their full scope of practice, would soon be coming to fruition. By the spring of this year, Hoskins said that amendments would be made to the *Nursing Act to finally allow RNs to prescribe medication (more can be read here). The response was immediate; all of the nurses and soon-to-be-nurses rose to their feet, ardently cheering and applauding. The hope and passion in the room was almost palpable, and it was at this point that I realized that this monumental change toward better patient outcomes was all due to the tireless work and perseverance of registered nurses.*

'Inspired' is really the best way I can sum up my experiences at Queen's Park Day. I would encourage nursing students to participate in events like these, not only for the networking opportunity, but to see a different side of nursing that we often don't read about in our textbooks. Political action and advocacy is just as important as knowing how to start an IV line – we can help our patients in more ways than one.

18th Annual Diabetes Education Conference
On Friday May 5th, 2017

OPTIONS FOR DIABETES
A Centre for Learning

Who should attend?
Health care professionals e.g. nurses, dietitians, pharmacists, social workers, chiropodists, physicians …interested in increasing their knowledge about diabetes. May be of particular interest for those preparing for their CDEs.

Where?
The Holiday Inn, 1 Princess Street, Kingston, ON, K7L 1A1

To Register*: print clearly and mail* Name, Address, City/Prov. Postal Code, Phone or email, Profession

Registration includes materials, lunches & breaks

Registration - Health Professionals $225; after April 13th, $300

Registration -Student $50 **[proof required] PAYMENT MUST ACCOMPANY REGISTRATION FORM.**

Please make cheque or money order payable to OPTIONS FOR DIABETES.

Mail to: Options for Diabetes, c/o Margaret Little, 1909 Hogan Road, RR #2 Perth Road, ON KOH 2LO

Deadline for Early Registration: April 13th, 2017

Diabetes and Breastfeeding: Heading Off Concerns Before They Begin

By: Shelley Hlymbicky RN BScN, International Board Certified Lactation Consultant (IBCLC)

"Breastfeeding is the normal and unequalled method of feeding infants. Health Canada promotes breastfeeding - exclusively for the first six months, and sustained for up to two years or longer with appropriate complementary feeding - for the nutrition, immunologic protection, growth, and development of infants and toddlers" (Health Canada, 2017).

Most women make the decision to breastfeed during the prenatal period. Can diabetes affect mom's ability to breastfeed? Simply put, yes. I have found that many women with diabetes are not aware that they may encounter added obstacles with breastfeeding, often due to low milk supply. This does not apply to everyone; however, we do not want moms to be caught unaware of what they could do to prevent problems before they begin. Added to this, researchers have discovered that pregnant women with either pre-existing diabetes or gestational diabetes are less likely to initiate and continue breastfeeding their newborns than women without diabetes (Brazier, 2016).

We can all agree, each from our professional chairs, that with appropriate care, the risks to a mother with diabetes and her baby can be minimized (Thomson et al, 2013). It is likely that if a mom has had good control of her blood sugars she will deliver a healthy newborn and likely be able to breastfeed with minimal problems. However, even if blood sugars are in the normal range, mothers with diabetes can encounter issues with breast milk supply.

There is a complex of hormones interacting to support breastfeeding. Here is what we know about the influence of insulin specifically related to breastfeeding:

- Insulin plays a supportive role in puberty with mammary development
- Breasts are relatively insulin resistant during pregnancy
- During pregnancy, insulin regulates the switch from cell proliferation to cell differentiation of the mammary glands; insulin resistance can affect this process.
- This series of cellular changes causes mammary epithelial cells to convert from a non-secretory state to a secretory stage. This is a two stage process:
  - Lactogenesis I: mid pregnancy to 2 days post partum
  - Lactogenesis II: 3 days post partum to 8 days post partum
- Insulin is one of many hormones necessary for Lactogenesis II, the stage of copious milk supply
- After delivery, the breast becomes more insulin sensitive
- Insulin influences milk synthesis

With diabetes, there are potential risks for mom and baby during birth and early postpartum that can affect breastfeeding:

- Increased potential for birth complications
- Increased risk of separation of mom and baby
- Hypoglycemia protocols in hospital leading to early introduction of formula
- Mothers with diabetes may have lower prolactin levels, the lactation hormone may have lower thyroid levels, affecting milk supply
- Newborns may have immature sucking patterns
- Potentially longer time in the colostrum stage that may lead to cluster feeding for one half to 2 days longer than non-diabetic mothers, which may lead to early introduction of formula
- Delay of mature milk 'coming in'
- Low milk supply

The best way to support moms is with education. Let her know that getting and keeping blood sugars in the target range will not only be healthy for her but will also be beneficial for breastfeeding and the health of her baby. Advise her of the potential for delays in milk coming in and help her to make a plan for early support before she has concerns about her milk supply.

Here are some of the things mom can do to help develop her milk supply:

- Good self care with blood sugars in range
- Skin to skin contact with baby for the first hour after birth
- Breastfeed within the first hour after birth
- Learn to position the baby for deep latch and to avoid cracked or broken down nipples. Some diabetic moms can experience delayed wound healing
- Hand expression of breast milk will lead to earlier copious milk supply
- If necessary, ask for help while still in hospital, and find out how to access an International Board Certified Lactation Consultant (IBCLC)

If mom needs help after discharge from hospital:

- Check with the local Health Unit to find out about breastfeeding services such as clinics, drop in locations, breastfeeding appointments. Many health units have IBCLC lactation consultants on staff
- Alternatively, private lactation consultants or health care providers with evidence based breastfeeding knowledge may be available
- Breastfeeding peer support groups such as La Leche League, groups may run through health units or private business

Not all mothers with diabetes will encounter issues with milk supply. With stable blood sugars and early education, mothers with diabetes will be more able to meet their breastfeeding goals.

References:

Brazier, Y. (2016). Diabetes during pregnancy linked to low breast milk supply. Retrieved from http://www.medicalnewstoday.com/articles/306777.php

Health Canada. (2017). Infant Feeding. Retrieved from http://www.hc-sc.gc.ca/fn-an/nutrition/infant-nourisson/index-eng.php

Registered Nurses Association of Ontario (2003). *Breastfeeding Best Practice Guidelines for Nurses.* Toronto, Canada: Registered Nurses Association of Ontario. Retrieved from : http://rnao.ca/sites/rnaoca/files/Breastfeeding_Best_Practice_Guidelines_for_Nurses_0.pdf

Thompson D., Berger H., Feig D., Gagnon R., Kader T., Keely E,. Kozak S., Ryan E ., Sermer M. & C. Vinokuroff. Diabetes and Pregnancy. Can J Diabetes 2013;37(suppl 1):S168-S173.

Cassar Uhl, D. (2014). Insulin resistance and lactation insufficiency FAQs. Retrieved from https://dianaibclc.com/2014/05/06/insulin-resistance-and-lactation-insufficiency-faq/

Stuebe, A. (2009). The risks of not breastfeeding for mothers and infants. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2812877/

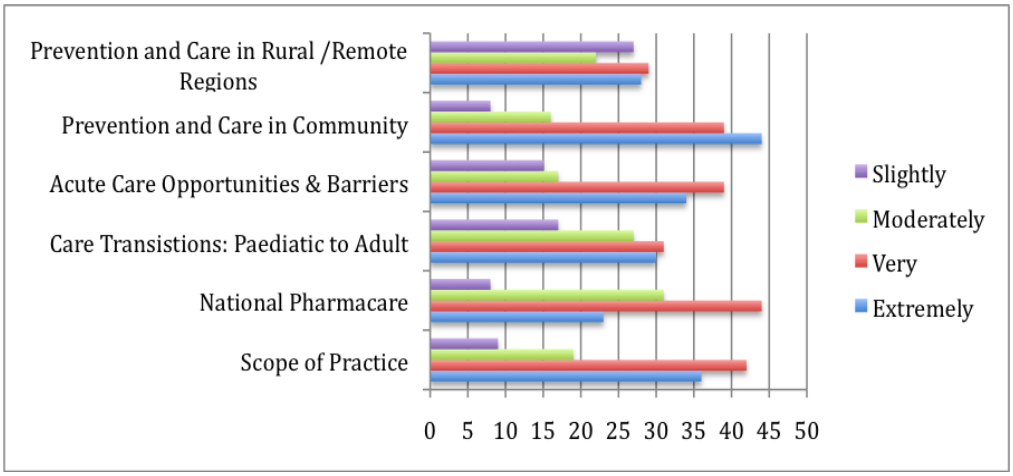
DNIG Survey: What you told us?

By Alwyn Moyer RN, PhD

Last November we sent a survey to all our members (RN and student), through the RNAO site. We had 107 respondents from 1,350 successful email deliveries for a response rate of about 8%. Half of the respondents were Registered Nurses (47) and Nurse Practitioners(2), 22 of whom had a CDE; 48 were Undergraduate Students. The RN and NP respondents reflect our diverse membership across the health care field: Hospital and Long Term Care (12); Home Care (4) Diabetes Outpatient and Community Clinics and Family Health Teams (27) and a few from Public Health, Telepractice, Educational Institutions and the Self employed.

Figure 1 summarizes interest in five topics we identified:

1) Scope of practice & independent RN prescribing: Implications and opportunities for diabetes nurse educators
2) National Pharmacare program movement: implications for diabetes care and management
3) Diabetes care transitions: pediatric to adult care
4) Diabetes prevention, education and support: opportunities and barriers in acute care
5) Diabetes prevention and nursing in community/public health and primary care
6) Diabetes prevention and nursing in rural/remote and northern regions



Other policy topics or priorities identified as important to nursing practice.

Always looking for ways to keep up on research and best practice:

- new approaches to medication management and blood glucose monitoring, especially for older adults; screening and early identification of diabetes in special population.
- *how best to help clients cope with diabetes* and manage it well; preventing foot complications. Cultural aspects of diabetes education and nutrition

Ethical challenges, such as home care residents who refuse treatment.

Changing Service Delivery Roles: collaboration between diabetes educators and dieticians; integration of diabetes nurse educators into primary care.

Different approaches to prevention and care: for example community prevention for people with diabetes; Finding ways to mitigate the impact of poverty on living successfully as a person with diabetes; providing good care to vulnerable populations such as the homeless and new immigrants.

Can we look at getting insulin and syringes covered for all people in Ontario?

Finding employment in diabetes care.

We will be following up on your interests and suggestions in the coming months!

DNIG 2017 Conference Funding Application

We are pleased to report that we have funding to support **three members** to attend diabetes focused conference in 2017. The funding will cover costs of travel, accommodation, and meals, up **to a maximum of $1000 per member.** Please send us completed, scanned application to dnig.info@gmail.com

Applications will be reviewed and granted by March 31st and September 30th, 2017.

Name: _____

Address: _____

Email: _____

Phone: _____

RNAO membership # _____

DNIG Membership duration _____

Employment status: FT PT

Employer _____

Please tell us about the conference you wish to attend, approximate distance and your anticipated mode of transportation. _____

*NOTE: For reimbursement agreed upon amount, an expense report and all receipts are to be submitted to DNIG no later than 1 month following conference completion.

Please attach a 1-page document (maximum 500 words) outlining why you qualify for this funding.

Be sure to:

- Describe your professional objectives for attending the conference.
- Describe your involvement (past/present) in your professional association/DNIG
- Describe your employment status, location, role in diabetes nursing
- Describe how you will share what you have learned with your nursing colleagues

Please provide one professional reference.

Name: _____ Phone number: _____

I certify that all information contained I this application is true and accurate.

Applicant signature _____ Date: _____