Prenatal Nutrition in Team-Based Care: A Qualitative Investigation of Current Practices and Opportunities for Collaborative Optimization of Care

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Today's Presentation

- Background & Rationale
- Research Aims
- Methods
- Results
- Discussion
- Moving Forward
- Conclusion

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Background & rationale

- Maternal nutrition has significant health impacts
  (Barger, 2010; Innis & Friesen, 2008)
- The dietary intake of Canadian pregnant women is suboptimal
  (Cohen et. al., 2012; Pick et al., 2005)
- Pregnant women are motivated for dietary behaviour change
  (Szwajcer et al., 2005; Wilkinson & Tolcher, 2010)
- Opportunity for optimization of care

Background & rationale

- Current shift towards team-based primary care models
  (Health Force Ontario, 2014; Levesque et al., 2012)

- Includes a prevention mandate

- Previous studies have shown interest in improving prenatal nutrition care
  (Bonilla, 2013; Levesque et al., 2012; Sargeant et al., 2008, Soklaridis et al., 2007)

- The current state of prenatal nutrition care delivered in team-based primary care models is unknown

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Research aims

1. Describe the process of prenatal care

2. Describe the process of prenatal nutrition care

3. Identify gaps, challenges

4. Examine practitioner's "dreams" of optimal care

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Methods

- 10 Interdisciplinary focus groups, 5 in FHTs and 5 in CHCs

- Inclusion criteria
  - ≤ 2-hr driving radius of Guelph
  - ≥ 3 health care providers
  - ≥ 3 different professions

- Contacted FHT & CHC directors via phone and e-mail
  - Directors invited care providers to participate

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Methods

- 1-hour interdisciplinary focus groups held at the team's location
- Demographic questionnaire
- Semi-structured interview guide
- Trained facilitator and transcriber
- Thematic Analysis using NVIVO software

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Results
Participant Demographics

- 10 focus groups in 5 FHTs and 5 CHCs
  - 5 rural & 5 urban locations
- 73 health care providers including:
  - GPs, nurse practitioners, dietitians, midwifes, nurses, health promoters, social workers, pharmacists, physiotherapists, respiratory educators, support staff, residents
- Participants were primarily female and had a range of levels of experience

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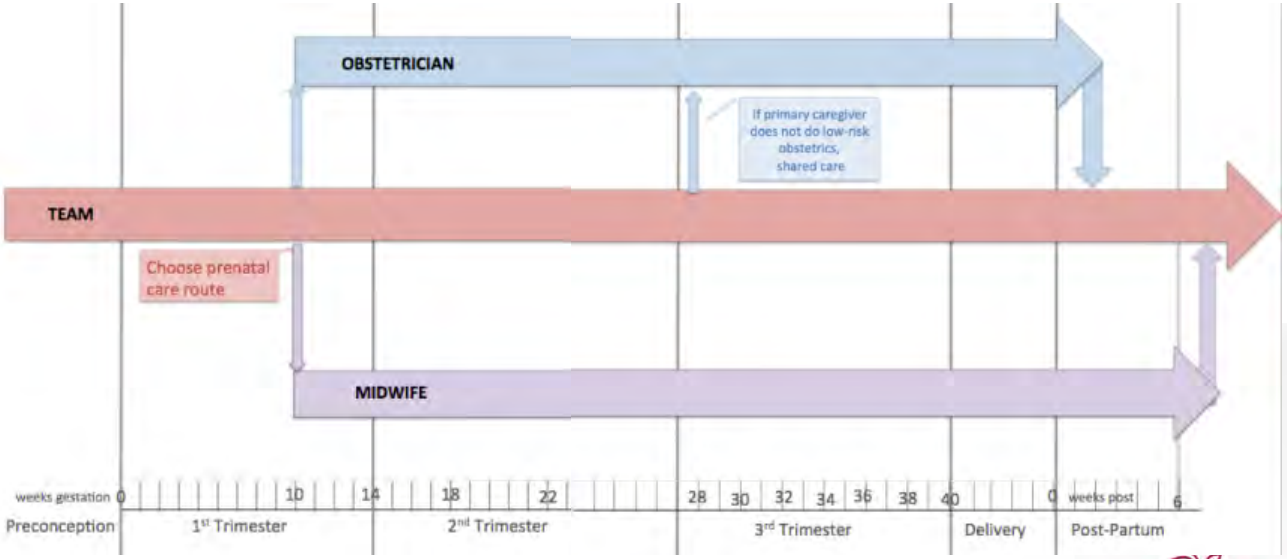
Results: Prenatal Care Process



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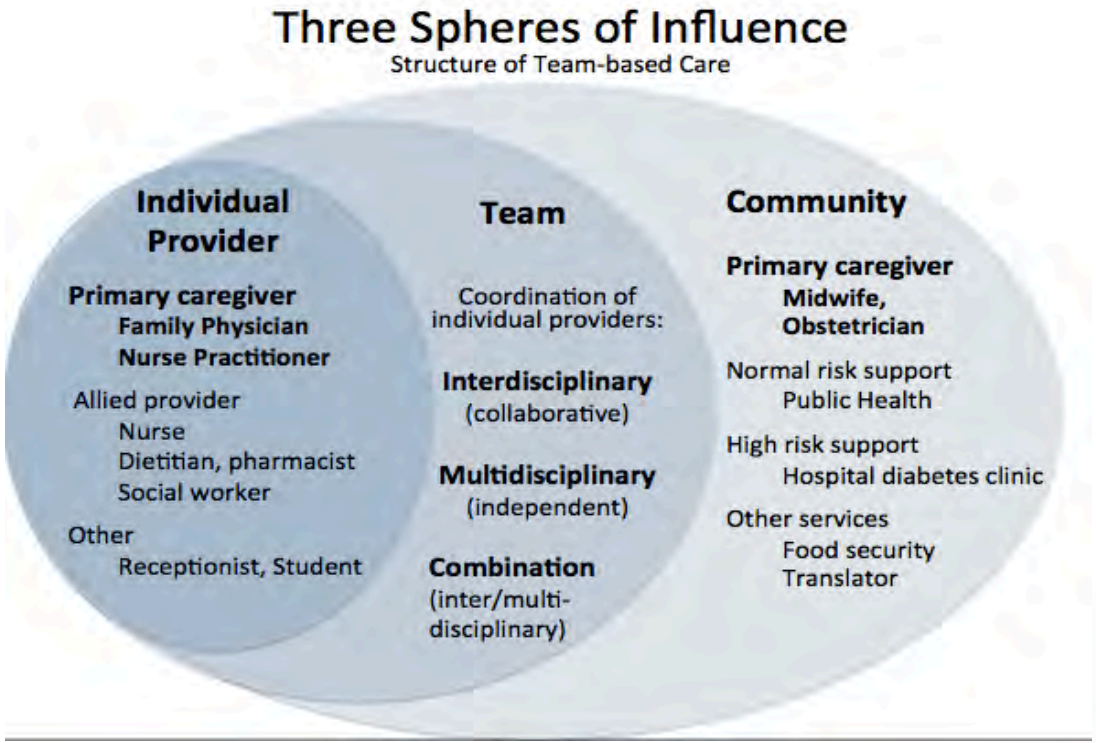

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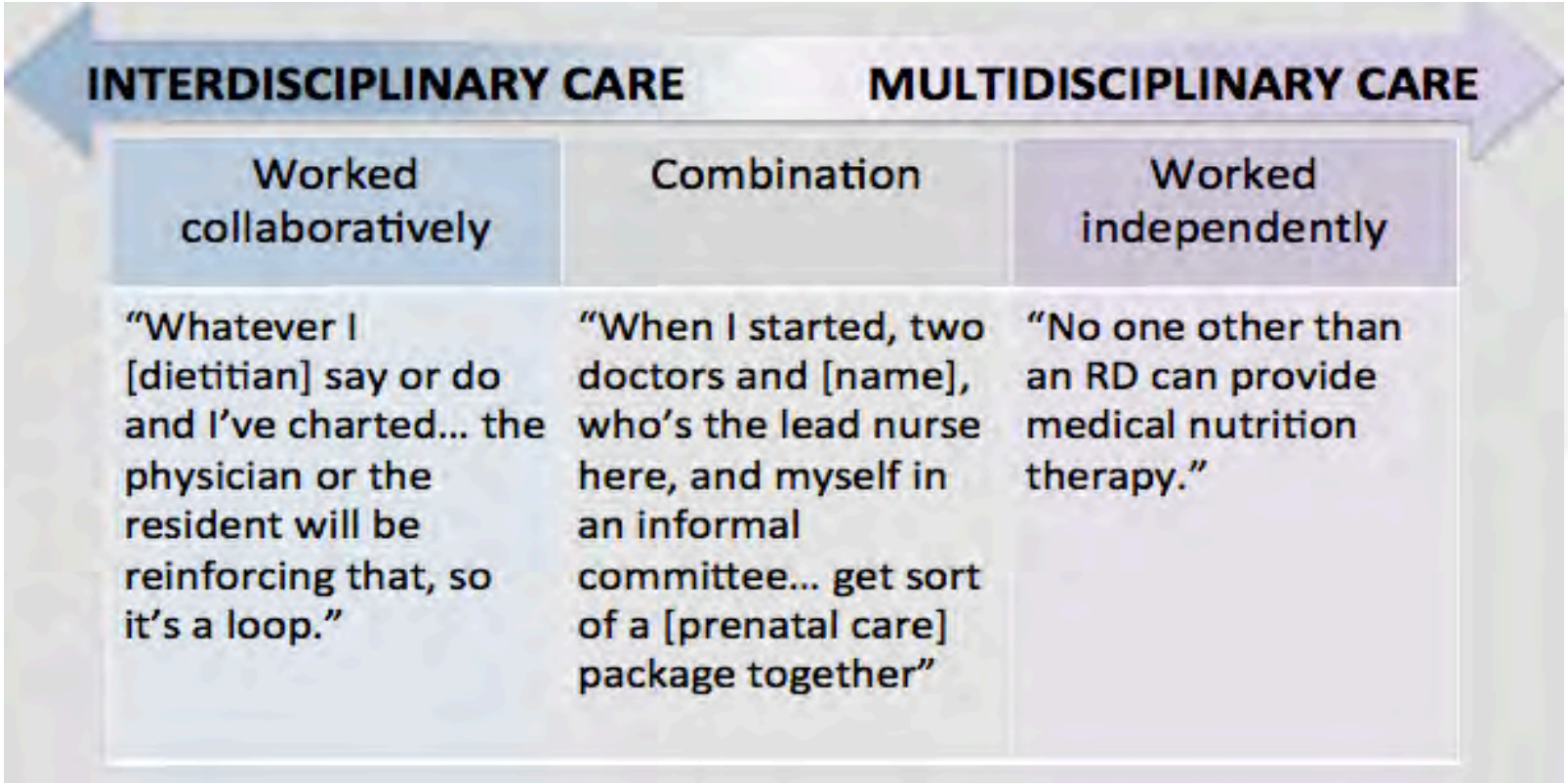

INTERDISCIPLINARY CARE ⟷ MULTIDISCIPLINARY CARE

Worked collaboratively	Combination	Worked independently
"Whatever I [dietitian] say or do and I've charted… the physician or the resident will be reinforcing that, so it's a loop."	"When I started, two doctors and [name], who's the lead nurse here, and myself in an informal committee… get sort of a [prenatal care] package together"	"No one other than an RD can provide medical nutrition therapy."

Results: Prenatal Nutrition Care

	Type of Care	Details
Verbal communication during prenatal visits	Assessment Education Counseling	• Prenatal supplementation • Food safety, alcohol intake • Morning sickness • Gestational weight gain guidelines
Take-home prenatal care package	Education	• Prenatal supplementation • Food safety, alcohol intake • Canada's Food Guide • Distribution of gestational weight gain
Connection to additional prenatal nutrition care programs and services	Assessment Education Counseling	• Referral to team members (ie. Dietitian) • Public health programs, Hospital services • Food security programs

Results: Gaps in Prenatal Nutrition Care

Gap 1: Borderline high risk pregnancies

a) High pre-pregnancy BMI

"I think our hardest group of women… with a very high BMI… we know the outcome may be… more high risk… we're sort of painted into a corner... but there's nothing in our scope to protect us from high BMI. So we take everybody up to 40 BMI." (FG7 CHC).

b) High blood sugar levels

"An impaired glucose tolerance… the community [diabetes clinic] referral won't take those, because they don't meet the criteria." (FG4 FHT).

Results: Gaps in Prenatal Nutrition Care

Gap 2: Lack of care surrounding gestational weight gain

"none of us are probably doing a very good job of it" (FG5FHT)

"It's not about a diet at all… we are monitoring her weight every time she comes in, and I tell her how she's doing in terms of the [gestational weight] guidelines... that's all it is though." (FG2FHT)

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Results: Gaps in Prenatal Nutrition Care

Drivers and Barriers to Discussing Gestational Weight Gain

Drivers	Barriers
• Providers feel responsible • Patients are concerned	• Insufficient time • Lack nutritional training, expertise, supportive resources • Weight is a sensitive topic • Lack awareness of prevalence in own practice • Combat patient's fear of the dietitian • Combat patient's misconceptions • Counselling is ineffective

Results: Dreams for Future

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Results: Dreams for Future

1. Fulfill Prevention Mandate

"The preconception time, that's probably the golden egg" (FG5FHT)

"I [dietitian] created a prenatal, preadmission nutrition screening tool that is to be asked at each first visit… asking, do you skip meals… have you ever been told that you have… gestational diabetes or elevated blood sugar… are you concerned that you cannot afford to eat a balanced diet?" (FG5FHT)

Results: Dreams for Future

2. Empower the Individual Provider by:
   - Integrating the dietitian into routine care
   - Dietitian provides up-to-date resources
   - Dietitian provides education to other team members for better shared care

“if they’re [the patients] receiving the same message from a variety of providers, then they’re more likely to take it in” (FG6CHC)

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Results: Dreams for Future

3. Empower the patient for self-care by:
   - Promoting dietitian services for pregnant women
   - Creating patient administered screening tools
   - Having greater availability of nutrition resources for hard to reach women

Results: Dreams for Future

4. Build the patient's medical home by
   - Creating a one stop health care environment
   - Strong connections with public health and community resources

"We're overburdened… we can't do it all in primary care" (FG3CHC)

Re: meetings with public health:

"What this group is about, is to… have those conversations… then generating newer programs as needed... fill the gaps that we identify" (FG5FHT)

Discussion

- Prenatal care processes and prenatal nutrition care have not been previously explored in depth
  - Previously data based on brief physician surveys
    (McDonald et al., 2011; White et al., 2006)

- The main challenges are:
  - Addressing borderline high risk pregnancies
  - Discussing excess gestational weight gain

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Discussion

- Identified dreams for improving care
- Identified first steps for achieving those dreams
  - Screening tools
  - Education for team members
  - Greater collaboration with community

Discussion: Strengths & Limitations

- Variety of teams represented
- Objectiveness - external trained facilitator & transcriber
- Reliability – compared two independent analyses
- Validity - piloted interview guide
- Lack patients' perspectives
- Heighted interest due to volunteer sampling
- Social desirability bias due to group setting

Moving Forward
Close the “high risk” care gap

- **Establish the term “high-risk pregnancy” across stakeholders**

- **Implement clear practice guidelines to address excess weight & high blood sugars in pregnancy**

  - Which team members involved
  - Training protocols for these providers
  - Supportive nutritional resources

Moving Forward
Close the excess weight care gap

- **Create weight-related educational resources**

- **Implement training for team members**

  - Improve weight management knowledge and skills
  - Improve confidence in discussing sensitive topics
  - Minimize time barrier by sharing responsibilities

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Moving Forward
Capitalize on shared dreams

- **Improve screening tools and prenatal care packages**

- **Support interdisciplinary care and community outreach**
  - Build on team and community strengths
  - Embrace variation to allow teams to adapt to their unique community
  - Support non-dietitians to provide nutrition care

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Moving Forward

- This research has been presented at:
  - Dietitians of Canada Conference
  - Canadian National Perinatal Research Meeting
- Manuscript currently under review in the Canadian Journal of Dietetic Practice and Research

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