

Teachable moments and Type 2 diabetes

Qualitative studies

Author and year	Study aim(s) as relevant to the current review	Country	Participants (number and characteristics)	Design/Methodology	Findings	Study limitations
Thresia, Thankappan & Nichter (2009)	To investigate patients' sense of perceived risk of tobacco use as a factor associated with diabetes complications	India	N=444 DEMOGRAPHICS Current smokers (N=100) 82% cigarette smokers 77% bidi smokers Age: 55.8 Education: 90% literate Socio-economic status: 44% low and 56% from class	Qualitative, exploratory, interviews	Following diagnosis, 45% had quit completely. However, quitting was for general health reasons. Only 21% of the smokers and 25% of the chewers quit because they believed smoking can lead to diabetes complications. Following diagnosis, 27% of the cigarette smokers and 31% of the cigarette and bidi smokers reduced consumption by ≥75% and 30% of	Identified by the author: no participants from a upper socio-economic class Identified by the researcher: time since diagnosis not specified

Teachable moments: Potential for behaviour change among people with Type 2 Diabetes and their relatives

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					<p>the bidi smokers reduced by 50%. 52% of people who did not quit, reported that smoking does not influence diabetes. Second-hand exposure was not perceived to impact diabetes. A small proportion reported the smoking may interfere with drug effectiveness.</p> <p>Patients did not tie specific symptoms with smoking. They believed that messages provided by health professionals were too general rather than specifically linked to diabetes, so they were dismissed.</p>	

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					<p>Key teachable moment message: Messages provided by health professionals at the time of diagnosis, need to be specific and link current behaviour to condition-related health outcomes.</p>	

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Quantitative studies

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Author and year	Study aim(s) as relevant to the current review	Country	Participants (number and characteristics)	Design	Measure(s)	Results	Study limitations
An, 2015	To evaluate the role of diabetes diagnosis as a teachable moment in nutrition label use. Hypothesis: people diagnosed with diabetes pay more attention to daily diet compared to people who are not diagnosed with diabetes	USA	N=5110 DEMOGRAPHICS Diabetes diagnosis: 8% Age group: 27% 20–34 years; 31% 35–49 years; 24% 50–64 years; 17% 65 years and above Sex: 52% Female Race/ethnicity: 73% White, non-Hispanic; 11% African American, non-Hispanic; 5% Other race/multi-race, non-Hispanic	Quantitative, cross-sectional	Measure for diabetes: the answer of ‘yes’ to the interview question ‘Have you ever been told by a doctor or health professional that you have diabetes or sugar diabetes?’	People with diagnosed diabetes were substantially more likely to report nutrition facts label use in daily grocery shopping compared to people without a diagnosis (<.001). Key teachable moment message: Aim was to explore potential of diabetes diagnosis to be a teachable moment. People with diabetes more likely to use nutrition labels but no causation can be assumed.	Cross-sectional study so no causation can be assumed; didn’t control for missing data; timespan of diabetes not measured; undiagnosed diabetes represented 1% of the sample.

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<p>Azar, Chung, Wang, Zhao, Linde, Lederer, Palaniappan, 2015</p>	<p>to examine the effectiveness of clinic-based behavioral lifestyle (diet and/or physical activity) counseling/education interventions in promoting weight loss among individuals with newly diagnosed type 2 diabetes.</p>	<p>USA</p>	<p>N=1 314 Type 2 diabetes diagnosed in the past 12 months and no other serious clinical conditions where weight loss is not advised. DEMOGRAPHICS Age: 54 Gender: 41% female Ethnicity: 49.7% non-Hispanic white; 36.8% Asian</p>	<p>Quantitative, observational study</p>	<p>Type of type 2 diabetes treatment type (formal behavioural lifestyle counselling only, medication only, counselling and medication and monitoring only); Body weight</p>	<p>People in the counselling and medication group lost the most weight in the first year, compared to the other groups ($p < .001$); a “dose-response” relationship where effect size increased when patients attended 4 sessions versus 1-3 sessions, then plateaued after 4 sessions. Authors suggest that type 2 diabetes diagnosis may be a teachable moment where people may be particularly receptive to learning about diabetes self-management. Key teachable moment message: The aim of the study was not to explore teachable moments potential.</p>	<p>Possibility of selection bias; adherence to medication was not examined; other behaviours that may have affected the primary outcome (weight loss).</p>
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						The conclusions are not supported by the results.	
Gallagher, King, Haga, Orlando, Joy, Trujillo, Scott et al. 2015	To determine whether representations of type 2 diabetes and genetic testing are favourable for adoption of healthy behaviour changes; if they are, patients' interest in genetic testing could serve as a springboard for productive counselling	USA	N=391 People with no self-reported family history of diabetes, no previous genetic testing for diabetes, fasting glucose <7mmol/L. DEMOGRAPHICS Age: M=50 years Gender: 70% female Ethnicity: 1% American Indian or Alaskan Native; 5% Asian; 29% Black or African American; 1% Native Hawaiian or other Pacific Islander; 60% White; 5% multi-race	Quantitative, secondary data analysis	BMI, waist circumference, fasting plasma, fasting insulin, family history of type 2 diabetes, interest in genetic testing.	Patients showed high interest in genetic counselling and believed in the effectiveness of healthy eating and exercise for type 2 diabetes prevention. The study concluded that people's interest in genetic testing for type 2 diabetes provides a teachable moment for behaviour change counselling. Key teachable moment message: Interest in genetic testing as a teachable moment but not supported by the results.	Sample was comprised only of people interested in genetic testing.

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<p>Tehrani, Hashemi, Hasheminia, Azizi, 2012</p>	<p>To investigate whether women with Gestational diabetes have a heightened risk for cardiovascular disease factors compared with women without gestational diabetes</p>	<p>Iran</p>	<p>N=29 Women with history of gestational diabetes DEMOGRAPHICS Age=33.6 years BMI=30kg/m²</p>	<p>Quantitative, a nested longitudinal case control study</p>	<p>Bodyweight, height, waist and hip circumferences and blood pressure, BMI, fasting blood sugar</p>	<p>The risk of developing type 2 diabetes after giving birth for women with gestational diabetes was 27.3% at 9-year follow up. The authors conclude that the timely recognition of gestational diabetes may be a teachable moment when women are motivated to make health behaviour changes and reduce their risk of developing type 2 diabetes. Key teachable moment message: Diagnosis of gestational diabetes may be a teachable moment to prevent type 2 diabetes. This was not supported by the results.</p>	<p>Small sample</p>
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