

# Diabetes education plan according to johnson and raterink (2009)

[Education](#)



## **Introduction**

According to Johnson and Raterink (2009), Type 2 Diabetes Mellitus (DM) is a major global chronic health issue. Though, it is found that the condition is largely preventable as many of the risk factors for developing the disease such as excess weight, poor diet, inactivity, smoking and excessive alcohol consumption, are modifiable behaviours (Australian Bureau of Statistics, 2011).

A client newly diagnosed with Type 2 DM may be unaware that the illness can be effectively self-managed with changes to diet, lifestyle and if necessary the inclusion of oral hypoglycemic agents (Australian Institute of Health and Welfare [AIHW], 2008). Therefore, the aim of the education plan is to assist the client to make educated lifestyle choices and changes that will improve health outcomes and reduce the risk of diabetic complications. The education plan will develop evidence-based client education strategies that focus on diabetes management and the modification of unhealthy lifestyle behaviours.

According to Funnell, Anderson, Austin, and Gillespie (2007), developing appropriate individualised educational strategies that increase client knowledge enables the client to make self-directed behavioural changes that aid in effective self-management and improved health outcomes. Background Diabetes care and self-management education needs to be tailored to the individual (Funnell et al. , 2007). The client, in whom this education plan is tailored for, is a 50 year old male with a body mass index of 32 who has been newly diagnosed with Type 2 DM.

In designing the education plan it is also important to assess and include extended resources of support for the client (Goldie, 2008). Resources of support may include client's family and friends, utilisation of local community services and allied health care providers such as social workers, dieticians and podiatrists (Hunt & Grant, 2010). For the client to make informed choices they need to be educated on the disease process and possible complications. Diabetes is an illness that occurs when the body is unable to maintain normal levels of glucose in the blood (McKenny & Short, 2011).

Type 2 DM is a progressive disease, characterised by hyperglycemia resulting from defects in the secretion of insulin (AIHW, 2012). Chronic hyperglycemia affects function of cells and tissues and may result in cardiovascular disease, kidney disease, vision loss and lower limb amputations due to neuropathy and peripheral arterial disease complications (AIHW, 2008). Treatment of Type 2 DM is complex with evidence emphasizing the need and importance of a collaborative healthcare team approach (Robertson, 2011).

Initial treatment for those newly diagnosed involves nutritional therapy and exercise to aid in weight loss (Zisser, Gong, Kelley, Seidman, & Riddell, 2011). However, as Type 2 DM is a chronic progressive condition, pharmacotherapy is usually required (Tsang, 2012). Oral hypoglycaemic agents are typically the first pharmacological intervention to improve glycaemic control and these agents include Biguanides (Metformin), Sulphonylureas, Acarbose, Meglitinides, and Thiazolidinediones (Phillips & Twigg, 2010; Sanchez, 2011). Tsang (2012) argues that Metformin is recommended as the first line of treatment.

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In addition, due to the progressive nature of the condition most clients will require insulin therapy to achieve and maintain adequate glycaemic control (Nyenwe, Jerkins, Umpierrez, & Kitabchi, 2011). Newly diagnosed clients require substantial guidance and education regarding disease self-management (Johnson & Raterink, 2009). Self-management issues the client and family may have include adhering continually to a daily regime of monitoring blood sugar levels and the self regulation of diet, exercise and medication (Long & Gambling, 2011).

Clients and their families also need to know how to manage the complications of diabetes including foot hygiene and the management of hypoglycaemic or hyperglycaemic episodes (Sanchez, 2011). Specific focus of education Through the identification of self management issues and potential areas of knowledge deficit, the nurse is able to tailor an education plan that focuses on the individual learning needs of the client and their family, resulting in mutually agreed upon short and long termgoals(Aranda, 2008).

Therefore, client and family education will focus on positive lifestyle modifications to increase physical activity and improve eating habits (Bartol, 2012). The lifestyle modifications of healthy eating and increased activity levels improve blood glucose control, aid in weight management, improve general health and may reduce the need for oral hypoglycemic agents (Sanchez, 2011; AIWH, 2012). In addition, education on the self monitoring of blood glucose (SMBG) focuses on self-management strategies.

Education should focus on how to perform the test with the use of a blood glucose meter, how to care for equipment and how to manage a high or low  
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blood glucose reading (Sanchez, 2011). SMBG is an important component of diabetes management as it enables the client to learn and evaluate the effects of diet and exercise on blood glucose levels which should aid better adherence to treatment regime (Nyenwe et al. , 2011). Client knowledge deficit in relation to oral hypoglycaemic medications and insulin therapy should also be addressed.

Medication education should provide information regarding what each medication is, dosage, possible side effects and if they interact with any other medications (Bullock & Manias, 2011). Education that focuses on medications is important as it can enhance clients understanding and willingness to take it (Bartol, 2011). Lastly, due to the increased risk of foot ulceration and lower limb amputations, it is important to provide an educational intervention that focuses on foot hygiene and care (Ogrin & Sands, 2006).

Diabetes education on foot care aims to prevent foot ulceration by focusing on self management strategies to improve foot care behaviours (The National Health and Medical Research Council [NHMRC], 2009). Education Strategies Before educational strategies can be implemented you must first identify possible challenges and any potential barriers to learning your client may have (Beagly, 2011). According to Beagly (2011) “ barriers that inhibit patient education are age, literacy, language, culture and physiological obstacles” (p. 31). Preferred learning style, language, cognitive ability and literacy level are determined during the assessment process (Funnell et al. , 2007). As the client is a 50 year old male, the principles of adult learning should be applied when choosing an appropriate educational strategy

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(Bullock & Manias, 2011). The principles of adult learning highlight that adults bring life experience with them and adults generally prefer self-directed, problem-based education that is relevant and applicable to their lives.

One-on-one discussion is one educational strategy found to have positive effects on lifestyle changes and increasing knowledge for clients with diabetes (NHMRC, 2009). One-on-one discussions enhance application of new information through the provision of relevant and practical advice, thus reflecting the principles of adult learning (Bullock & Manias, 2011). These discussions also enable feedback on progression and application of theory into practice (Kaufman, 2003). Discussions should also include individual and group family education sessions.

Mayberry and Osborn (2012) have found that when family members are educated on diabetes management, improvements in clients self-care behaviours, weight and glycaemic control were noted. Providing education through demonstration is another effective adult learning strategy and should be used for educating the client on SMBG and foot care. Demonstration is an effective strategy for my client as according to the theory of self-efficacy, "observing other people can strengthen our beliefs that we can perform similar tasks, even when the task is unfamiliar" (Kaufman, 2003, p. 14). Furthermore, both discussion and demonstration are effective strategies for my client as most middle aged adults still have the cognitive function and ability to learn new skills (Crisp & Taylor, 2009). Diabetes management is multi-disciplinary and requires a collaborative healthcare approach (Hunt & Grant, 2010). As a result, referring the client to <https://assignbuster.com/diabetes-education-plan-according-to-johnson-and-raterink-2009/>

a dietitian for review is an important education strategy to aid in positive dietary modifications (Sanchez, 2011).

This education strategy draws on the evidence-based practice guidelines for the nutritional management of Type 2 DM (Dietitians Association of Australia [DAA], 2006). The guideline highlights that the primary responsibility of the dietitian is to determine a nutrition plan in collaboration with the client's needs and goals (DAA, 2006). Referring the client to local community services that provide free group exercise programs is also an important education strategy to be incorporated in the plan (Van Dijk, Tummers, Stehouwer, Hartgens, & Van Loon, 2012).

Kaufman (2003) argues that according to social learning theory people learn from one another through observation, imitation and modeling behaviour. Visual material including handouts, information packs and website resources are also effective educational strategies for adult learners as they assist self-directed learning (Beagley, 2011). Self directed learning is an effective intervention to facilitate behaviour changes as it enables the adult client to be responsible for their learning, promotes autonomy and can be shared and discussed with family and friend support networks (Funnell et al. 2007).

## **Conclusion**

Recommendations In conclusion, type DM is a self-managed chronic disease that requires those affected to be actively involved and informed in their own health care. This education plan has provided relevant information and identified appropriate evidence-based educational strategies that can assist the client newly diagnosed with type 2 DM to make positive lifestyle

modifications and reduce the risk of complications. The education plan also emphasizes the importance of extended family and community support to assist in positive health outcomes.

The translation of knowledge, willingness to change and sustain positive self-care behaviours is now the overall goal with diabetes management requiring ongoing education and support from healthcare professionals to help clients implement and sustain lifestyle changes (Long & Gambling, (2011). It is recommended that the client has regular reviews and health checks then modification of educational needs and strategies can be assessed and implemented as the disease process changes and the needs to the client changes.