

**Week 2, session 2.**

**Topic: Hypoglycaemia Time allocation 30 minutes**

**Process:** The educator will ask specific questions to elicit prior knowledge which will help the participant to value and reflect on their prior experience. Information and answers from participants will be written on flip charts under specific headings such as experience, symptoms, causes and treatment of hypoglycaemia. The educator will encourage each person to contribute and every comment will be actively listened to. The educator will facilitate all discussion and the session will be run as an interactive workshop.

The participants will be actively engaged by asking them specific questions about their experience of hypoglycaemia. They will be encouraged to reflect, share their experiences and to ask any questions. All questions will be answered in an honest, open and non- judgemental way. Participants will be encouraged to use the type 1 workbook and to make notes if they wish.

**Learning Theory:** Social Learning Theory

**Learning objectives**

1. to understand what the term hypoglycaemia means
2. to be able to list the most common symptoms of hypoglycaemia
3. to understand that these symptoms may change over time and may not always be recognised by them
4. to understand how to prevent hypoglycaemia
5. to know how to self manage and effectively treat hypoglycaemia

Specific aspects of theory	Educator activity	Participant activity	Resources
Verbal persuasion/ elicitation of knowledge  Emotion management; verbal persuasion/elicitation of knowledge; role modelling	Educator will cover each topic by:  1. Eliciting participants current level of knowledge 2. Asking questions and responding to answers to increase understanding 3. Using participants' experiences to learn from each other 4. Asking if participants have any further queries	Each participant will be encouraged to:  1. Recall own experience and reaction to previous hypoglycaemia 2. Describe own experience of symptoms of hypoglycaemia 3. Respond to questions using own prior knowledge and experience 4. Use responses of self and fellow participants to increase understanding	<ul style="list-style-type: none"> <li>• Flip chart and pens</li> <li>• Type 1 workbook</li> <li>• Lucozade and measuring jug</li> <li>• Glucose tablets</li> <li>• Sweets</li> <li>• Glucostop</li> <li>• Glucagen injection</li> </ul>

	before moving on to next section	<p>5. Work out reasons for symptoms of hypoglycaemia and how these may change or be lost in some cases over time</p> <p>6. To consider ways of avoiding hypoglycaemia</p> <p>To recall most effective ways of treating hypoglycaemia</p>	
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### Detailed lesson plan

Learning outcomes/opportunities	Educator activity	Notes
<b>Hypoglycaemia</b>		
To know what the term hypoglycaemia means	Elicit participants' understanding of the term hypoglycaemia	
<p>To understand that hypoglycaemia is a blood glucose level of less than 4mmol/l with or without symptoms and requires treatment.</p> <p>To understand that effects of hypoglycaemia can last for up to 24 hours and cause unpredictable patterns in blood glucose levels.</p>	Elicit participants' understanding of what blood glucose level requires treatment for hypoglycaemia from own experiences	Motto is 'make 4 the floor'.
<b>Symptoms</b>		
To be able to list the symptoms of hypoglycaemia	<p>Educator will ask what their experience of hypoglycaemia has been and what symptoms have been experienced.</p> <p>Educator will encourage all to participate and participants own words will be written down on flip chart.</p>	
<p>To understand why symptoms occur.</p> <p>To know that the symptoms of hypoglycaemia may diminish with time.</p>	<p>Reference will be made to workbook and participants work in small groups to discuss reasons for symptoms.</p> <p>Educator will explain</p>	<p>As glucose levels fall warning symptoms occur giving participant time to correct hypoglycaemia.</p> <p>Mild hypo can be treated independently by participant.</p>

	-sympathetic response (ie sweating, tremor) -neuroglycopenic (ie behaviour change, coma)	Symptoms caused by adrenaline response and in conjunction with other hormones raises blood glucose by releasing stored glucose from the liver. If left untreated or if warning symptoms diminish over time then may experience moderate/severe hypoglycaemia and require help from third party. Lack of glucose to the brain responsible for changes in behaviour. If not treated may lead to unconsciousness
<b>Causes</b>		
To be able to understand causes of hypoglycaemia	Educator will ask participants to recall own experience of hypoglycaemia and to identify possible causes	Too much insulin. Over estimation of the carbohydrate content of food. More physical activity than planned Alcohol in moderate/large amounts.
<b>Treatment</b>		
To understand ways to avoid hypoglycaemia	Educator to ask participants how hypoglycaemia can be avoided, exploring their own experiences to help illustrate points. Educator will encourage participants to understand the importance trying to avoid hypoglycaemia.	Consider reducing insulin prior to planned increased activity. Ensure accurate CHO estimation. Review dose of long acting insulin. Consider not giving insulin when drinking alcohol, depending upon own experiences.
To understand ways to effectively treat hypoglycaemia. To understand importance of increasing low blood glucose level as soon as possible. To understand that 10 –15g of CHO may be sufficient.	Educator to elicit from participants how they manage hypoglycaemia. Use actual experiences of the group to problem solve. Find out what has worked and what has not been successful and why.	Reference made to workbook If necessary repeat action until blood glucose above 4mmol/l. Insulin not required for CHO used to treat hypo. Follow with snack or meal for which insulin is given.
To be aware of importance of treating hypoglycaemia early	Educator to draw on participants' experiences of moderate or severe hypoglycaemia.	If symptoms moderate or severe may require help form others. Swallowing reflex impaired – danger of choking. Increased risk of unconsciousness
<b>Glucagon</b>		
To understand the role of Glucagon To know that Glucagon	Educator will elicit any prior knowledge of Glucagon Educator will explain role of	Glucagon is a natural hormone made in the pancreas

raises blood glucose by releasing stored glucose from liver (Glycogen) Produced naturally when blood glucose levels fall.	Glucagon. Educator will explain that it can also be given by injection (Glucagen) by third party, if necessary.	
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