

**Appendix 1.** Conceptualisation of matching quantitative and qualitative questions

Quantitative questions (questionnaire)	Qualitative questions (interview)
How confident do you feel in providing education for: vegetarians, vegans?	Explain how you provide nutritional education to specific groups? e.g. vegans, vegetarians?
How confident do you feel in providing education for: cultural food choices, ethnic minority?	Do you provide nutritional education specific to cultural food preference? Could you give any examples?
How confident do you feel in providing education for complex medical conditions? Do you have a dietitian's services at your hospital? Do you make referrals to the dietitian?	Conditions which require a referral/ when do you make a referral?
What information sources do you use as the basis for providing nutrition advice?	Do you use additional materials such as brochures?

**Appendix 2.** Examples of extreme case analysis with interpretation

Extreme case analysis	Knowledge score	Confidence score	Comment
<i>Quantitative: Overall knowledge and confidence:</i> A positive correlation was found between midwives' knowledge and confidence score over three-time points measurement, with a highly statistically significant difference ( $p < .007$ ) during the pre-questionnaire			
High level score	(9/12) questions	(44/45) questions	Positive correlation
	<i>Qualitative follow-up</i> ...I guess probably with women from different cultures so that would probably be the big thing...So, I think ...there's a little bit of a downfall with women from different cultures and women that are a vegan as well. So, I think after having been to your talk I probably would give different advice now [MW6]		<i>Outcome:</i> High level of knowledge and confidence helped midwife to identify what further knowledge needed
Low level score	(2/12) questions	(11/45) questions	Positive correlation
	<i>Follow-up</i> This participant did not complete the following education and other two questionnaires or interview		<i>Outcome:</i> Some midwives still require general and advanced healthy eating education.