



## Conference on ‘Changing dietary behaviour: physiology through to practice’ Symposium 4: Changing diet and behaviour – putting theory into practice

### Changing dietary behaviour: the role and development of practitioner communication

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The need to support people to change diet-related behaviour is widely advocated and how to do this effectively in practice is an expanding area of research. Important factors to consider are how healthcare practitioners communicate with their patients and how that communication may affect diet-related behaviour change and subsequent outcomes. The aim of the present paper is to discuss communication skills for behaviour change (CSBC), focusing predominantly on registered dietitians who are required to communicate effectively and have an important role in supporting patients to change diet-related behaviour. The views of dietitians in relation to CSBC have been investigated and respondents have consistently reported that they perceive these skills to be of vital importance in practice. Patient views have reiterated the importance of good CSBC in one-to-one consultations. However, pre-qualification training of dietitians is thought to deliver practitioners who are competent at a minimum level. The need for ongoing continuous professional development (CPD) in relation to CSBC has been recognised but currently most CPD focuses on updating knowledge rather than improving these essential skills. Measuring CSBC in a consistent and objective manner is difficult and an assessment tool, DIET-COMMS, has been developed and validated for this purpose. DIET-COMMS can be used to support CSBC development, but concerns about logistical challenges and acceptability of implementing this in practice have been raised. Although a suitable assessment tool now exists there is a need to develop ways to facilitate assessment of CSBC in practice.

**Diet: Behaviour change: Communication skills: Dietitians: Assessment tools**

Poor diet is closely associated with the increasing global burden of non-communicable disease<sup>(1)</sup>. Change in dietary intake to help decrease the incidence of these diseases and related risk factors has become a key goal<sup>(1)</sup>, as small changes in lifestyle and dietary behaviours are believed to make a big difference to health<sup>(1–3)</sup>. Many individuals, communities, professions and organisations are involved in the work to support this in a wide variety of ways. In the UK, dietetics is a registered profession and registered dietitians have an important role as professionals who are able to assess, diagnose and treat diet and nutrition problems at an individual and wider public health level. They provide practical advice and support dietary

change to promote good health<sup>(4,5)</sup>. The majority of UK dietitians work within healthcare and in recent years there has been a profound change in the National Health Service (NHS) with the Department of Health directing a move towards a more patient-centred approach<sup>(2,6–8)</sup>. Key principles have included supporting the public to make healthier and more informed choices relating to their health, providing accurate information, health promotion, promoting individual responsibility<sup>(2)</sup> and empowerment of people to improve their health<sup>(6)</sup>. To facilitate a patient-centred NHS, there is a need to ensure that NHS staff work in a patient-centred way, which includes how they communicate with patients. The

**Abbreviations:** BDA, British Dietetic Association; CPD, continuous professional development; CSBC, communication skills for behaviour change; HEI, higher education institutions; NHS, National Health Service; NICE, National Institute of Health and Care Excellence.  
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National Institute of Health and Care Excellence (NICE) highlighted that training to equip practitioners with the necessary competencies and skills to support behaviour change, using evidence-based tools, was a priority<sup>(3)</sup>. The importance of the communication skills of health care staff were explicitly linked with the patient-centred approach in the NHS Essence of Care Benchmarks for Communication<sup>(9)</sup> and by the NICE Patient Experience in Adult NHS Services<sup>(10)</sup>. Both documents describe specific ways in which healthcare staff should work with patients, including treating the patient as an individual, considering psychological and emotional support, and enabling patients to actively participate in their care and treatment decisions<sup>(9,10)</sup>. The importance of listening and communication on the development and maintenance of successful caring relationships has been emphasised<sup>(11)</sup>. NICE guidance on behaviour change<sup>(12)</sup> identifies specific skills that all healthcare professionals should be trained in, such as reflective listening, demonstrating empathy, building rapport, developing motivation and delivering behaviour change techniques. Behaviour change practitioners who have received training should also be regularly assessed on their ability to deliver behaviour change interventions<sup>(12)</sup>. Together all of these documents demonstrate a consistent move towards a patient-centred approach, a strong emphasis on the need for behaviour change and the importance of the communication skills of healthcare staff. All these are highly relevant to the work of dietitians and others who work to encourage dietary behaviour change.

The present paper will review the evidence for the use of good communication skills for behaviour change in dietetics, primarily focusing on the UK guidance and policy but incorporating other research. It will discuss the views of dietitians, present an evidence-based tool which can be used to support the development of communication skills and suggest possible ways for this to be used in practice. Although focussing on dietetics much of this is applicable to other practitioners.

### The benefits of communication skills for behaviour change in nutrition and dietetics

It is a requirement of the UK Health and Care Professions Council that dietitians must 'be able to communicate effectively'<sup>(5)</sup> and the present paper's focus is on communication skills for behaviour change (CSBC) in dietitians. This has been defined as 'the communication skills that a dietitian may use within a person-centred approach in one-to-one communication with an individual patient. This may include, but is not limited to, skills which enable patients to make appropriate choices, express their thoughts and feelings, feel heard and understood, feel valued, respected and supported'<sup>(13)</sup>.

There is evidence that good CSBC are beneficial in dietetic one-to-one consultations with patients but also that there may be some negative consequences of poor skills. However, it should be noted that the literature has described these skills in a variety of ways and not

all as defined here, which makes direct comparisons between studies challenging.

Demonstrating empathy, that is, the desire to understand what their patients are feeling and experiencing<sup>(14)</sup>, is essential in dietetics<sup>(4,5)</sup> and in other healthcare professionals<sup>(9-12)</sup>. Goodchild *et al.*<sup>(15)</sup> undertook an observational study by video recording dietitians' consultations with patients with diabetes. They found that the more empathic the response to emotional cues within consultations, the more satisfied the patients were. There was also a trend towards greater agreement about what had been discussed. A recent study has reiterated this with higher levels of professional empathy leading to significantly greater levels of agreement about decisions made in consultations<sup>(16)</sup>. Empathy and motivational interviewing have also been shown to lead to more extensive dietary changes being made, but this was not sufficient to lead to changes in clinical outcomes<sup>(17)</sup>.

Good communication skills have consistently been shown to lead to improved patient satisfaction<sup>(15,18,19)</sup>. In an Australian study, Vivanti *et al.*<sup>(18)</sup> found that staff presentation and interpersonal skill accounted for 52.4% of the variance in patient satisfaction. Interpersonal skills were defined by statements from the patients' perspective such as, 'the dietitian listened carefully to what I had to say' and 'I felt understood by the dietitians'. Although it is not directly a clinical outcome, patient satisfaction is important as highly satisfied patients are more likely to maintain appointments and adhere to recommendations, which is essential for effective practice<sup>(19)</sup>.

Appropriate non-verbal communication has a role in positively reinforcing patient responses<sup>(20-22)</sup> and in the development of trust<sup>(23)</sup>. Trust develops when the dietitian is considered to be authentic, real and genuine, much of which is seen through the non-verbal communication<sup>(23)</sup>. Also in Australia, Cant<sup>(23)</sup> used interviews and focus groups with both dietitians and patients and found that patients wanted to be listened to, receive individualised guidance and have a positive partnership with the dietitian. Dietitians aim to build rapport with their patients to gain their trust and respect which is important to enable them to work collaboratively. A caring relationship involving active engagement, sharing and open communication is valued by patients as much as the clinical skills<sup>(24)</sup>. Personal presentation is also a key source of non-verbal communication for patients<sup>(25)</sup>. Similarly Hancock *et al.*<sup>(26)</sup> investigated patient's views on dietetic consultations and identified that patients had positive experiences when the dietitian built rapport and communicated well with them. Patients wanted dietitians to treat them as individuals and utilise a patient-centred approach but to do so requires flexibility on the part of the dietitians as some patients prefer a practitioner-led and some a patient-led consultation<sup>(26)</sup>. Comparable results have been found in Israel by Endevelt and Gesser-Edelsburg<sup>(27)</sup> who completed focus groups with patients who either failed to attend follow-up appointments or had attended at least three appointments. They found that although most patients preferred an empathic and individualised approach, there were some for whom the information giving and educational approach

is sufficient. The flexibility to adjust to the patients' preferred style is an important skill for dietitians to develop<sup>(26)</sup>.

### Consequences of poor levels of communication skills for behaviour change

The benefits of the good use of CSBC are evident and patients' preferences are clear, but what happens if these skills are not demonstrated to a high standard? Parkin and Skinner<sup>(28)</sup> found significant disagreement between patient and professional (diabetes specialist nurses and dietitians) perceptions and recollection of the content of consultations. Patients reported fewer topics being discussed by the professionals and fewer decisions about treatment. This highlights a significant problem in patient-professional relationships, if the two parties appear to recall different consultations. The patient may appear non-compliant but their response may be due to a joint lack of communication skills. In cases where the patient was given more autonomy in the consultation they were able to develop more autonomous motivation to diabetes self-care which is an important outcome<sup>(28)</sup>.

Lack of confidence in using CSBC has been shown to stop healthcare professionals in a diabetes team (including dietitians) addressing psychosocial issues that were of key importance to the patients<sup>(29)</sup>. Additionally lack of time to build rapport with patients leads to an inability to identify patients' feelings and concerns<sup>(30)</sup> and lack of time has been identified by dietitians as a barrier to using CSBC<sup>(13,31)</sup>. Patients were less likely to attend follow-up consultations when the dietitian lacked a patient-centred approach, lacked empathy, did not individualise advice or focused on information giving<sup>(27)</sup>. There are questions as to whether these staff would be able to meet the present recommendations for practice<sup>(9,10,12)</sup>.

Overall the literature suggests that there are positive outcomes when dietitians use higher levels of communication skills and potentially some negative effects when skills are less well developed. Although little difference has yet been demonstrated in clinical measures, some of the outcomes evaluated will clearly affect how patients respond to a consultation and the use they make of a dietetic service. This in itself indicates the value of working towards dietitians and other practitioners all being more highly skilled in this area. Dietitians working in practice will differ in when and where they undertook their pre-qualification training and their choices of continuous professional development (CPD). This suggests that there may be a variation in the skill level in relation to CSBC in practice. Further research is required to explore the relationship between the CSBC of the dietitian and the nutritional efficacy and related cost-effectiveness of the services delivered.

### Pre-qualification (or pre-registration) training in communication skills for behaviour change

In the UK, to successfully complete their pre-qualification training a student will have to be assessed

as competent in CSBC<sup>(5)</sup>. However, some dietitians have not felt that their training has equipped them well enough. A survey of British Dietetic Association (BDA) members completed in 1997<sup>(32)</sup> found that dietitians recognised a gap in their pre-qualification education and recommended that behaviour change strategies be further integrated into both pre- and post-qualification training. Similarly research from the USA<sup>(33)</sup> and Canada<sup>(34)</sup> reported that there was little evidence of education in behaviour modification and behavioural counselling skills in dietetic education. However, in all of these studies the response rate was quite low and there was likely to be a bias towards those who were most positive about the need to develop their CSBC. A web-based survey<sup>(21)</sup> with Australian dietitians found that they felt that their pre-qualification training had focused on knowledge acquisition rather than the development of skills for nutrition counselling and delivered practitioners who were competent at a minimum level<sup>(21)</sup>. More recently trained dietitians were significantly more positive about their pre-qualification training<sup>(21)</sup>. Dietitians in Israel felt that the profession was transforming from an educational approach towards a more behavioural approach, but there were still gaps in the pre-qualification training to facilitate this<sup>(27)</sup>. In the UK in 2007, a cross-sectional survey was undertaken with the aim of seeking the views of all BDA members on both the use of, and the need for training in CSBC in the dietetic profession<sup>(13)</sup>. Nearly one-fifth (*n* 1158) of BDA members responded, diverse in their years of experience and specialist areas, providing a unique insight into their views on the use of CSBC in dietetic practice. Less than half (*n* 512, 44 %) reported having dedicated training on CSBC in their pre-qualification training. Those who had qualified since 2000 were more likely to state than they had received pre-qualification training ( $P < 0.001$ ) than those who had qualified before that. Since 2000, students on clinical placements have been developing a portfolio of evidence to demonstrate their competence. This includes assessment tools for one-to-one consultations which their supervising dietitians have assessed as competent<sup>(35)</sup>. However, these assessment tools differ in relation to the prominence of CSBC within them and the extent and style of CSBC training varies between higher education institutions (HEI). Pre-qualification training is also constantly developing. It should also be considered that BDA membership, and respondents to this survey<sup>(13)</sup>, includes individuals from students through a range of years of experience up to retired members. Traditionally, dietetic practice was based on a medical model, being expert led with dietitians being more didactic and working predominantly as providers of advice<sup>(20)</sup>. Many of the respondents who had been qualified longer were likely to have been trained in this approach rather than working in a more patient-centred way. Overall the results of all of these studies suggest a need for more pre-qualification training in CSBC. It is likely that as curricula are revised and courses updated that training in CSBC may be further developed to meet

professional<sup>(4,5)</sup> and policy<sup>(12)</sup> guidelines, but it is currently unclear as to exactly what is being taught where and how.

### How should pre-qualification training be delivered?

The survey by Whitehead *et al.*<sup>(13)</sup> also ascertained BDA members' views on how CSBC should be delivered at a pre-qualification level. Respondents clearly indicated that CSBC training was a joint responsibility between HEI and their partners in clinical practice. Practical skills development and assessment were valued including video recording of mock consultations and practising on real patients<sup>(13)</sup>. HEI need appropriate resources and facilities to deliver such training. Staff at HEI and placement locations require the ability to demonstrate appropriate skills to the students and to cultivate a safe and positive learning environment. Attitudes of teaching staff have been shown to affect the attitudes of students<sup>(36)</sup> both in HEI and clinical placements, and there is some evidence to show that students are less positive about learning communication skills at the latter stages of their training<sup>(36)</sup>. This may be due to the perception within the students that they have already learned these skills rather than them needing to be continuously learned and developed. Educators from both HEI and clinical placements should accentuate the idea that skills need to be continuously learned. Similar findings have been found in medicine<sup>(37)</sup> and nursing<sup>(38)</sup> where learning of other skills has appeared to displace the emphasis on CSBC.

As well as identifying teaching methods, respondents in this survey<sup>(13)</sup> clearly identified a wide range of skills that graduate dietitians required, which came within the definition of CSBC. This included broad terms, such as listening, reflecting and non-verbal communication and less frequently more specific skills such as paraphrasing, open questions and summarisation. They also however clearly identified a requirement for more advanced techniques such as motivational interviewing and cognitive behavioural strategies which are consistent with a previous survey<sup>(32)</sup>.

Pre-qualification training of CSBC is likely to have developed since this survey was completed in light of government policy<sup>(9)</sup>, NICE guidance<sup>(3,10,12)</sup>, Health and Care Professions Council guidance<sup>(5)</sup> and publication of the BDA curriculum framework for the Pre-Registration Education and Training of Dietitians in 2008<sup>(39)</sup> and subsequent update<sup>(5)</sup>. There has also been further research into the role and effect of CSBC in dietetic practice<sup>(19,21,23,27)</sup>. The use of portfolios has continued and in Australia, undergraduate dietetic students rated feedback on their consultations and counselling skills as the most useful aspects of their clinical placement portfolio<sup>(40)</sup>. CSBC are now central components of undergraduate medical education in the UK and a framework has been developed to support medical schools to develop the education they provide<sup>(41)</sup>. Central to this is respect for patients and the evidence base for the essential role of effective communication and patient-centredness.

Generally teaching methods for pre-qualification training of healthcare professionals on communication skills are developing both in light of increasing evidence of behaviour change theories<sup>(42)</sup>, review of what techniques work<sup>(40,43-45)</sup> and also due to the development of information technology<sup>(46,47)</sup>. Evidence across a variety of healthcare professions emphasises the importance of experiential learning, formative feedback and observational assessment<sup>(45)</sup>. Outcomes appear to be better where skills practice has taken place and simulated patients and/or role play have been used<sup>(48)</sup>. There are however constraints to the implementation of communication skills training which include the expertise of the teaching staff, considerable teaching time and related cost<sup>(45,49)</sup>. Role play with students playing the patient for their peers is thought to be as positive a learning experience as the use of simulated patients and is more cost-effective<sup>(48)</sup>. Teaching communication skills as part of an inter-professional workshop has been well received by students<sup>(50)</sup>. Whatever methods are used pre-qualification training needs to give students opportunities to recognise the skills base needed, to develop the skills, to have that skill tested and to have individualised feedback to allow opportunities for improvement<sup>(49)</sup>. If pre-qualification training is to change and include more CSBC then there may be a need for CPD for those who will assess them. There is an assumption that dietitians automatically become more skilled over time but there is little evidence to corroborate this. There is some evidence that dietitians who have been using CSBC for a longer time and as a large part of their role have higher self-efficacy in their ability, but the link between their self-efficacy and skill level requires further investigation<sup>(51)</sup>.

More research is needed into the effectiveness of the various possible ways to teach CSBC to dietitians in the context of their one-to-one consultations with patients. Interactive methods and skills practice appear essential but are time consuming and resource intensive and there may be a place for more computer assisted instruction to support this learning. There is also a need for an objective and consistent way to assess these skills.

### Continuous professional development (or post-registration training) in communication skills for behaviour change

Many dietitians perceive that their pre-qualification training was not adequate and the survey by Whitehead *et al.*<sup>(13)</sup> found that the majority of respondents ( $n$  906, 79.6 %) had undertaken some CPD and were extremely positive about its effect<sup>(13)</sup>. Many have also stated a need for further training in specific areas such as active listening<sup>(32)</sup>, cognitive behavioural strategies<sup>(13,32)</sup>, motivational interviewing<sup>(13,32,34)</sup>, relapse prevention<sup>(34)</sup> other counselling and behavioural modification techniques<sup>(21,34)</sup>. CPD has been stated to lead to many improvements in practice including improvements in relationships with patients, greater confidence in client interviews, improved ability to cope with challenging clients and greater job satisfaction<sup>(13)</sup>. Some respondents

however indicated that they had not been able to put their training into practice with lack of management support and lack of time being the most common reasons<sup>(13)</sup>. Two key themes were identified from open text responses. First skills were not being perceived as relevant in certain situations or specialist areas; for example, 'In renal nutrition it is not always possible to let patients set goals etc. e.g. with low potassium diet you have to advise due to risks of hyperkalaemia'. Many dietitians ( $n$  641, 56.9%) suggested that CSBC were more relevant for some dietetic roles than others<sup>(13)</sup> but others feel that CSBC are relevant for all roles and with colleagues, other staff and carers as well as patients<sup>(13)</sup>. The second theme was the perception that more or better training was needed, for example, 'Although I have tried to put the theory into practice, I have found that the training was insufficient to change my practice markedly.'<sup>(13)</sup> This suggests that simply attending training is not always sufficient and that the training needs to build both skill level and confidence to use new skills in the workplace. Many respondents stated that they would like to have a refresher course which suggests that they perceive that skill level may fall over time without on-going training. The difficulty of transferring training into the workplace is well recognised<sup>(52,53)</sup>. There are many possible ways for dietitians to undertake CPD in CSBC but it is important to ascertain how effective that training is in leading to changes in skill level and the ability of the individual to then introduce the skills into their routine practice. Cant and Aroni<sup>(21)</sup> found that 56% of dietitian respondents were in favour of mandatory CPD to improve skill proficiency and indicated that the assumption that CSBC developed automatically with practice was erroneous. Another suggestion was that new graduates each had a programme of peer review, observation and feedback by more skilled practitioners<sup>(21)</sup>. It has also been suggested that on-going assessment and development of CSBC needs to become a normal part of professional practice for dietitians<sup>(54)</sup>.

#### Assessment of communication skills for behaviour change in dietetic practice

Having identified that many dietitians believe there is a need for ongoing CPD in CSBC and that current NICE guidance<sup>(12)</sup> suggests that those working to support behaviour change should be trained and assessed, then questions remain about how training can be delivered most effectively and how assessment could be implemented into routine practice. Although assessment of students is completed at various stages throughout their training this is not undertaken routinely for qualified staff. There is also a need for an appropriate validated tool to be available for use. There have been attempts to develop suitable assessment tools<sup>(55-57)</sup> all of which have demonstrated good content validity, that is the extent to which a panel of experts believe that the items included examine comprehensively, or represent a well-balanced sample of, the content domain to be measured<sup>(58)</sup>. In this case the content domain is the use of

CSBC in dietetic one-to-one consultations. However all of these research teams recognised the need for further development before their tools could be used to assess the skills of dietitians with confidence<sup>(55-57)</sup>. More recently Whitehead *et al.*<sup>(54)</sup> have developed and validated a tool, DIET-COMMS, for this purpose. DIET-COMMS is a simple form containing twenty items which cover the content of a dietetic consultation and the CSBC which are used within that. Each item can be scored with 0 (not done or not achieved) 1 (partly achieved or attempted) or 2 (fully achieved). Descriptors are available for each item to support consistent scoring. The psychometric properties of DIET-COMMS have been comprehensively tested and it has been found to have face validity, content validity, construct validity, predictive validity, intra-rater reliability and moderate inter-rater reliability. Semi-structured interviews with experienced dietitians who had undertaken the inter-rater reliability testing were used to assess face validity, that is a subjective assessment of the presentation and relevance of the tool being developed and whether the items or questions seem reasonable, clear and unambiguous<sup>(59)</sup>. This is important as such a tool needs to be pragmatic and easy to understand if it is to have a role in routine practice. These interviewees indicated that DIET-COMMS was easy to use and has many possible uses within dietetic practice including pre-qualification training and CPD. There was a strong feeling, however, that assessors need to have a good understanding of, and be skilled, in CSBC. They should also be trained to use the DIET-COMMS and its descriptors in order to ensure accurate and consistent scoring<sup>(54)</sup>. Another concern was about ensuring that an individual being assessed was given sensitive and constructive feedback to avoid individuals feeling judged or having their confidence negatively affected. For example, 'so whoever introduces it, they obviously need to be very skilled and diplomatic in the way they are doing it and selling it in a positive way as we are not looking to trap people, or mark you down, or stop you progressing, this is all about reassurance and improvements and opportunities for additional training, and time to reflect on your skills, and help if there are areas that you are struggling with really'<sup>(54)</sup>. Interviewees strongly believed that there would be reluctance in the dietetic profession to having their CSBC assessed post-qualification. Previous findings<sup>(12,21)</sup> suggest a much more positive attitude but both studies may be subject to bias with respondents more positive about CSBC than non-responders.

A second semi-structured interview was undertaken with the dietitians who had undertaken inter-rater reliability testing of DIET-COMMS and data was subject to thematic analysis<sup>(60)</sup>. The aim was to ascertain their perceptions on what best practice would be in relation to CSBC in dietetic practice and how that could be developed (K. Whitehead, unpublished results). These dietitians had witnessed variability in the standard of and attitude towards CSBC in dietetic practice both as part of research<sup>(54)</sup>, when facilitating training and within their colleagues in practice. They felt strongly that

CSBC are an essential part of all dietetic consultations and core to dietetic professional identity but that not all dietitians had developed CSBC to a high standard. Participants perceived that good use of CSBC had advantages to both the dietitian and the patient, and that there were significant and worrying disadvantages if skills are not used well. One key example is in relation to the development and maintenance of rapport with patients. Although most dietitians had been observed to develop rapport many did not maintain it as they moved through the consultation. The transition from building the relationship with the patient to advice giving was of key importance as many became more didactic at this stage. This is consistent with previous research which suggested that dietitians perceive their CSBC to be less important during the dietary history and information exchange part of the interview<sup>(13)</sup>. However, rapport needs to be maintained throughout the consultation if dietitians are to achieve current recommendations<sup>(10,12)</sup>.

These interviewees were clear that the dietetic profession needed to move forward in relation to CSBC. Many were involved in delivering CPD but felt that more needed to be done, particularly more peer observation in the workplace and the identification of other ways to transfer training into practice. There are many issues to consider in regard to assessment of skills including whether assessment of CSBC should be mandatory or not. The development and validation of DIET-COMMS offers one way to identify the skill level that exists in the dietetic workforce.

### The way forward

It has been suggested that a training package could be developed<sup>(54)</sup> to support peer education and assessment of CSBC. Subsequently a grant has been obtained to support the development, launch and evaluation of an open access on-line training package, based on DIET-COMMS. This could support pre-qualification training but also provide a no-cost, accessible and flexible CPD activity for dietitians and departments. Access to a training package could make it easier for departments to consider implementing peer observation and assessment programmes and overcome the barriers of having to develop something of their own. However, it would be beneficial to have someone skilled in CSBC to facilitate this and would require the service manager to support its implementation. The training package could act as a tool to facilitate a refresher course which many survey respondents<sup>(13)</sup> and interviewees<sup>(54)</sup> suggest is required to avoid skill level falling over time. A discussion forum or some other similar network could support dietitians with an interest in this area to discuss CSBC and how they could use and develop these skills in different situations.

Having a validated assessment tool available, facilitates further research. Assessing the effectiveness of pre-qualification training and CPD courses or of peer observation projects in the workplace is possible. Further studies could elucidate what a minimum acceptable score on DIET-COMMS would be at the end of the

pre-qualification training, bearing in mind that some individuals will reach a minimum level of competency in this area and some will achieve a much higher standard. Further research could also ascertain if the perceived barriers to assessment of CSBC<sup>(54)</sup> are really present and if so, identify ways to overcome them.

The evidence base for good CSBC making a difference in clinical outcomes in dietetics is still limited. Having a validated tool by which CSBC can be measured will allow research programmes that investigate that relationship. Creating an evidence base which demonstrates that good use of CSBC definitely leads to improved clinical outcomes such as better weight management, diabetes control and adherence to low potassium diets may encourage dietitians to embrace CSBC more. Improved outcomes will support dietitians to obtain funding to expand and develop good quality and cost-effective services but failure to do so could lead to service cuts as other service providers are commissioned to deliver.

There are now many different ways in which the patient contacts are made, including group education, telephone contact, email and text messages. Good communication remains relevant but there are some different considerations. CSBC will develop to be used in a variety of communication contexts and it is essential that further research be undertaken in these areas. Patients views will need to be explored and the best ways to undertake such communication ascertained.

The effective use of time which leads to the best patient outcomes is important to investigate. Time with patients is limited and there is a perception by some dietitians that using more CSBC takes more time<sup>(13,31)</sup>. The effective use of CSBC within the time allocated for consultations is an area that should be explored to facilitate the best patient outcomes.

### Conclusion

The present paper has reviewed the evidence in relation to CSBC in dietetics and considered both pre-qualification training and CPD. The development and validation of an assessment tool, DIET-COMMS, to facilitate the assessment of CSBC in practice has been discussed. Possible uses for DIET-COMMS and areas for further development both in research and practice have been presented. Successful implementation of these could support dietitians to meet their professional requirements<sup>(5)</sup> and present guidance<sup>(9,10,12)</sup>.

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### Conflicts of Interest

None.

### Authorship

This manuscript was prepared by Kirsten Whitehead.

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