A qualitative exploration of dietitians’ experiences of prescribing oral nutritional supplements to patients with malnutrition: A focus on shared tailoring and behaviour change support

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Abstract
Background: Oral nutritional supplements (ONS) are commonly prescribed to patients with malnutrition. Dietitians have been suggested as preferred prescribers but generally lack ONS prescribing rights. How dietitians with prescribing rights experience their professional practice of prescribing ONS remains understudied. Thus, by exploring dietitians’ experiences of prescribing ONS, the present study aimed to obtain a deeper understanding of specific aspects that are of importance for dietitians when providing a nutrition therapy including ONS.

Methods: Qualitative individual interviews were conducted with 13 dietitians prescribing ONS to free-living adult outpatients with malnutrition or at nutritional risk in the hospital or primary care setting. Systematic text condensation was used for data analysis.

Results: Two main categories signifying important aspects were identified and labelled: ‘Shared tailoring of the ONS prescription’ and ‘Supporting and facilitating ONS use’. First, the dietitians described tailoring the ONS prescription together with the patient, having their acceptance as a prerequisite, and being flexible regarding products and amounts prescribed. Second, they described performing different communication strategies and organising of practical issues (e.g., ONS delivery and support from others) to support and facilitate patients’ ONS usage.

Conclusions: The present study identifies patient involvement and the role of dietitians as behaviour change facilitators as two important aspects when dietitians prescribe ONS. These findings allow for dietitians’ ideals and strategies on how to prescribe ONS to be made more visible, which can inform both clinical practice and clinical trials for future improvements in nutrition therapy to address malnutrition.

KEYWORDS
behaviour change, dietitian, malnutrition, oral nutritional supplements, qualitative study
INTRODUCTION

Although prescribing oral nutritional supplements (ONS) is a common part of nutrition therapy for adult malnutrition, little is known about how dietitians experience the delivery of this intervention. ONS are medical nutrition products recommended to be added when food-based strategies are insufficient.1,2,3 Multi-nutrient liquid supplements are the most frequently used ONS, although they also exist in powder and pudding form.4 ONS prescriptions are similar to medical prescriptions because they are prescribed to patients, and are often dispensed by pharmacies and recommended for use under medical supervision.4 However, ONS usage is often described as problematic, for example, as a result of the acceptance of taste, texture or volume, resulting in low compliance (or adherence).5,6,7,8 To optimise compliance, it is recommended that the nutrition therapy with ONS be individually tailored and that patients’ preferences for type of supplement, flavours and manner of consumption should be taken into account.9

Although dietitian support appears to be central when aiming for improvements in ONS prescribing appropriateness,10 dietitians lack independent prescribing rights in many countries.11,12,13,14 Accordingly, other ONS prescribing healthcare professionals have expressed a lack of confidence when prescribing ONS12 and in choosing the ONS that is most appropriate.15 One solution proposed by Irish general practitioners to better tackle malnutrition and ONS management was greater access to dietetic service.12 In Sweden, dietitians, doctors and, in one out of 21 regions, district nurses have prescribing rights for ONS to adult hospital outpatients and free-living patients in the community, although dietitians are generally responsible for this task.16 An ONS prescription in this context involves both communicating a recommended intake of the specific food (here ONS) based on a nutritional assessment,17 as well as conducting a subsidised distribution of ONS to the patient. This entails an autonomous dietitian-led process concerning ONS, which is not dependent on permission or involvement from other healthcare professionals. Because dietetic professionals are suggested as a solution to the challenge of prescribing ONS18 and as the best in making the choice of which supplement to use,14 this Swedish setting is suitable for gaining more knowledge on dietitians’ experiences from performing this task. Even though there are recommendations on how to deliver an appropriate ONS prescription (e.g., set desirable goals, tailor it individually, advice on food first strategies and monitor continuously),9,10 researchers scarcely report on important details of ONS interventions, thus making it difficult to replicate successful trials.18 Insights into important features of the dietetic professional practice of prescribing ONS would be valuable for characterising key aspects of a successful ONS prescription. Therefore, the present study focuses on dietitians’ experiences of the prescribing process following a decision that a patient qualifies for a subsidised prescription. Consequently, by exploring those experiences, we aim to obtain a deeper understanding of specific aspects that are of importance for dietitians when providing a nutrition therapy including ONS.

METHODS

Study design

This is an explorative qualitative interview study focusing on dietitians’ experiences of the phenomenon of prescribing ONS. The study was inspired by phenomenological philosophy in line with a study using Systematic Text Condensation (STC) as analysis procedure,19,20 and took on a pragmatic theoretical approach.19,21 Approval for the study was sought from the Swedish Ethical Review Authority (Reference No. 2019-01198) and informed consent was obtained from all participants.

Study participants and recruitment

Dietitians who regularly prescribed ONS to adult outpatients and who worked in all clinical settings and regions of Sweden were invited to participate via the Swedish Association of Clinical Dietitians’ homepage, newsletter and Facebook group. Out of 1800 dietitians in Sweden,22 approximately 1300 are members of the association.23 To ensure a sufficient number of participants, in a second step of the recruitment process, managers of dietetic departments in geographical areas not yet covered were contacted and asked to spread the word about the study among their employees. This purposive sampling technique aimed to include dietitians with a broad range of experiences connected to prescribing ONS.21 In line with the concept of adequate information power, recruitment ceased when we found the interviewees’ descriptions to fulfil the aim of gaining new insights and understandings connected to the phenomena of prescribing ONS.24 Thirteen dietitians were recruited, and all were women with a mean ± SD age of 36 ± 12 years and had, on average, 10 ± 10 years of working experience. Seven dietitians worked in primary healthcare, providing nutrition therapy to a mixed group of patients, where the frail elderly were the main category being prescribed ONS. Six dietitians worked in hospitals, where some of them were specialised in one field of expertise such as oncology or gastroenterology, and others worked at smaller hospitals within a wide range of medical specialties. The dietitians are named as D1–D13 in the results section. Seven out of 21 Swedish regions were represented by the dietitians and, in these regions, ONS prescriptions were subsidised for patients with malnutrition or at nutritional risk. However, the degree of subvention (e.g., a patient fee of €0.5 per bottle or a three-level system of €30, 80 or 140 per month depending on amount prescribed), product selection and the delivery of the products were locally organised within each region.


Data collection

The individual semi-structured interviews were conducted by the first investigator (ELi) between October 2019 and April 2020. Based on reviewed literature and the study aim, an interview guide was created (see Supporting information, Appendix S1) with open-ended questions concerning experiences of prescribing ONS. The interview guide was tested in one pilot interview with a dietitian working in clinical practice; thereafter, minor changes were made. Each interview began by asking the dietitian to describe an ordinary day at work and continued by asking for a description of how she delivers ONS prescriptions in everyday practice. We aimed to capture areas regarding experiences of (i) the prescription occasion; (ii) the follow-up of a former prescription; (iii) patient usage of ONS and potential struggles faced; and, finally, (iv) the dietitians’ conceptualisation of ONS. Prompts and follow-up questions were used in order to capture in-depth descriptions of the participants’ experiences in everyday practice.25 The locations for the face-to-face interviews were meeting rooms at the dietitians’ work-places (n = 8), at restaurants (n = 2) and in the home environment (n = 2). One interview was rescheduled as a telephone interview as a result of travel restrictions because of the spread of COVID-19 during spring 2020. The interviews lasted from 39 to 68 min (mean of 55 min) and were audio-recorded and transcribed verbatim.

Data analysis

Data analysis was conducted following STC, a procedure for thematic cross-case analysis9 and NVivo 11 Plus26 was used to organise the data. All four investigators were involved in the analysis in collaboration, with ELi carrying out the principal coding of the material. The investigators are all registered dietitians, with experience in clinical practice. The first investigator (ELi) holds a clinical position at a university hospital but is on leave of absence during the doctoral studies. The other three investigators hold academic employments (AA – Ass Prof; ELö – PhD; MN – Prof Emer), conducting

research and teaching within the field of nutrition and dietetics. No relationships were established with the interviewees prior to commencement. However, because the dietetic work force is small in Sweden, the dietitians were more or less acquainted with the research group. The STC analysis followed four steps. In the initial step (1), all four investigators read parts of the transcripts to gain a general impression of the material and agreed upon preliminary themes. In the second step (2), ELi identified meaning units representing descriptions of prescribing ONS and sorted them into code groups. In line with STC guidelines, those selected meaning units were limited to ‘talk relevant for the study question’,19 p. 797). In the third step (3), subgroups were created and the content within each subgroup was further rewritten into a condensate by ELi. All four investigators discussed and agreed upon the code groups, subgroups and their labels continuously during recurrent analysis meetings. Finally, (4) the condensates were used as starting points for synthesis and an analytical text. The analysis process was performed in an iterative mode: interviewing, transcribing and coding parts of the material in a mixed stepwise manner. In line with the phenomenological attitude and a data-driven study approach, our ambition was to bracket our preconceptions, as in phenomenology, referring to an intention to stay atheoretical and open minded, and to keep the dietitians’ voices in focus.20,21 In the latter phase of the analysis, we went back and forth between the dietitians’ descriptions and theory/literature, following an editing analysis style.19,27 Themes, code groups, subgroups and final categories are presented in Table 1. After finishing the analysis process, aiming to deepen the understanding, the results were interpreted though the shared decision-making framework28 and the model of the Behaviour Change Wheel.29 This elaboration is covered in the Discussion.

RESULTS

The dietitians described food-based strategies as the base of the nutritional intervention for malnutrition, although ONS was often talked about as being more simple and achievable.

| Preliminary themes* (step 1) | Code groups (step 2) | Subgroups (step 3) | Final categories (step 4) |
|-----------------------------|----------------------|---------------------|--------------------------|
| Acceptance/taste            | If it doesn’t taste good, they won't drink it | Acceptance as the biggest challenge To find a flavour that works | Shared tailoring of the ONS prescription |
| Navigating/‘dancing’         | The flexible ONS treatment | The tailored intervention The adjustable prescribed amount | |
| with the patient            | Simple and effective | To make them take it | Facilitate ONS use – navigating the welfare system The conversation as tool | Supporting and facilitating ONS use |

Abbreviations: ONS, oral nutritional supplement.

*The Preliminary themes should be regarded as separated from the Code groups because each theme is not directly connected to one specific code group but rather worked out as a starting point when forming the code groups.
for many patients. The dietitians described a complex process once they had decided that a person could benefit from and was qualified to have a prescription of ONS. Two final categories reflecting important aspects for the dietitians when prescribing ONS were identified and labelled as ‘Shared tailoring of the ONS prescription’ and ‘Supporting and facilitating ONS use’. Additional illustrative quotes are provided in the Supporting information (Appendix S2).

Shared tailoring of the ONS prescription

Because patient acceptance and involvement, in combination with dietitian flexibility, were expressed as essential when prescribing ONS, a picture of a shared tailoring process was identified. Patient acceptance was described as challenging and highlighted as the primary reason determining whether or not patients took their ONS. The sweetness or the metallic taste was recurrently addressed as the major taste obstacles. The dietitians described individuals’ preferences as very diverse.

Some of the patients are like "oh, it’s so tasty, I could just eat those (ONS)"; while some say "this is the most disgusting thing I’ve ever tasted". So, the patients’ views are very varied.

(D2, hospital)

For those patients accepting the taste of ONS, an uncomplicated and successful treatment was often described. If the patient did not like the taste of the ONS, the dietitians considered the prescription to be inappropriate. Therefore, all dietitians stressed the importance of letting the patient try out the supplements before writing a prescription and arranged for testing trials in different ways, depending on the context. For the dietitians, having patients who had problems with accepting ONS was challenging because it meant that an effective solution to the nutritional problem was not an option.

And the biggest challenge for us who have to prescribe or recommend it is that we hope they’ll like it, that it works out. Otherwise, it won’t work. So that’s a major issue, and the biggest challenge to make it work is the acceptance.

(D12, hospital)

Several dietitians expressed that having an extensive variety of products available for prescription was helpful. The process of finding ‘the right’ (D10, primary healthcare) supplement that the patient liked and accepted was described as important and sometimes comprehensive. If the patient did not like any of the initial products tasted or if the preferences had changed, they could be offered more trials with other flavours. One dietitian who made home visits to elderly patients described the process of finding accepted products in the following way:

I find the order that I’ve made and ask if there’s one that they have tasted that they prefer. And often, there are some (ONS) they haven’t tasted and then we can try them out when I’m there. Then, I can also see how they react and what they think about it.

(D13, primary healthcare)

If a patient could not accept the optimal products as being suitable for a prescription, the dietitians described turning to less optimal ones in order to achieve at least a somewhat better nutritional status than before. Liquid milk-based supplements were generally described as the optimal ones, whereas products with less extensive nutrient profiles were presented as less optimal (e.g., juice-based supplements and fat-emulsions). Many dietitians also expressed the choice of a ready-made liquid supplement as being more simple and hence more successful than powder supplements or supplements that required the patient to make an effort:

If they like one of them that I maybe wouldn’t have chosen as a first choice, then it is still much better that they take the one they like, rather than the optimal one, because it’s better than nothing. I think.

(D5, hospital)

Powders and stuff, it’s pretty seldom I prescribe those since I think it isn’t as effective or doesn’t become as much in the end. It also takes a bit more effort for the patients to prepare something with this powder. Ready-made ONS is much easier. It’s just to open the bottle and drink it.

(D3, primary healthcare)

The dietitians shared that, if the patient expressed resistance towards being prescribed ONS, it was important to respect their choice. They endorsed having a collaborative relationship where other solutions were then negotiated. Although those were mainly food-based solutions, enteral and parenteral nutrition were also mentioned, primarily by hospital dietitians:

A lot of compromising with the patient. And of course, it should be on their, I am there for their sake. They shouldn’t do anything for my sake, but you have to make deals with them. Yes, like, can you possibly eat and drink this, and then most of the times they usually agree to it.

(D13, primary healthcare)

The dietitians described the amount prescribed as flexible and adjustable. Having an authoritarian and informative consultation style was not viewed as desirable. Moreover, the dietitian’s clinical judgement on the optimal ONS amount required was often adjusted according to the patient’s wishes and his or her ability to drink it. For example, the decision about the amount prescribed could be initiated by asking the patient how many supplements he or she could manage per day, and the
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prescription could initially contain one per day even though the patient was evaluated as requiring three. At follow-up appointments, the prescribed amount was often changed based on acceptance and how many supplements the patient had consumed since the previous time. Also, body weight and total energy intake were important parts in deciding on continued amount. Another aspect of the flexible amount prescribed comprised reports about prescribing a range of ONS (e.g., 2–3 per day instead of a fixed amount). Arguments for this strategy were that the dietitians wanted to avoid making patients feel like they were forced to take ONS, to give patients freedom of choice and to support them in taking an active role in their nutrition therapy:

I usually say yes, you can drink between two or three per day, that’s not a problem. So I don’t know, maybe it confuses them, and if they have better appetite then they have to drink less. It is hard for me to say exactly how many they should take during a day since there’s a big variation from day to day. They have to feel that it’s a responsibility they need to take

(D5, hospital)

Some dietitians also mentioned educating patients on energy and nutrient contents of foods for them to be able to compensate for missed meals with ONS on their own. Both patients with cancer undergoing oncological treatments and patients with inflammatory bowel disease with episodes of active disease were acknowledged as groups where this self-regulating strategy was applicable.

If you can’t eat the whole dinner, for example, then you should take two ONS. If you can eat half a dinner and half a lunch, then it is two ONS together for those, and if they have better appetite then they have to drink less. It is hard for me to say exactly how many they should take during a day since there’s a big variation from day to day. They have to feel that it’s a responsibility they need to take

(D5, hospital)

Even if the dietitians expressed being very flexible with the amount prescribed, they also mentioned using fixed amounts, especially when they perceived the patient would benefit from having a specific recommendation. For example, one dietitian highlighted the importance of a clear and fixed prescription when communicating with the homecare service. In addition, another dietitian working at a hospital described situations where doctors sometimes decided if the patient was to be prescribed a complete ONS-based diet temporarily. The dietitian explained that these prescriptions were strict recommendations with no room for patient involvement.

Supporting and facilitating ONS use

The dietitians shared many experiences about supporting and facilitating ONS usage in the dialogue with patients and also by navigating external system entities such as payment level, ONS delivery and support from others. By informing, explaining, and motivating, the dietitians encouraged ONS use. For example, they stated that they informed patients about ONS benefits such as the high calorie content in a small volume and also on how to make ONS more palatable (e.g., by mixing it with different seasonings or serving them in a pleasant way). They also emphasised informing patients that ONS should not replace food but, instead, be used as an add-on. Having a well-informed patient, who understood the aim of ONS, was viewed as important for achieving patient compliance. Several dietitians pointed out that communicating a detailed prescription beyond the amount, including time-frame and serving instructions such as ‘drink half the bottle in the afternoon and half the bottle before you go to bed’ (D2, hospital) achieved better results than if it was left up to the patients to experiment for themselves. Another strategy for motivating ONS intake was to talk about ONS as medications to make patients take the prescription more seriously and improve compliance.

It feels as if our prescriptions aren’t taken seriously. But then, if you say that this is like a medicine for you …, then I feel that they might take it a bit more seriously

(D3, primary healthcare)

When the dietitians shared their experiences of price subvention, delivery of the products and patient’s dependency on the social system, a picture of the Swedish welfare system and its impact on ONS use appeared. Constantly navigating within this system, the dietitians described an active role in facilitating ONS use that often reached beyond the individual patient encounter. Price was perceived as central to patients and, as long as they accepted that the taste and the price was low, a great number of patients were described as finding an ONS prescription as being convenient. By contrast, dietitians perceived that, when patients were in a bad economic situation or if there was an increase in the payment fee, then patients were reluctant to comply with the ONS prescription. The solution could be having no prescription at all or prescribing a lower amount than what was optimal. Some dietitians also described being tempted to bypass the payment rules (e.g., by not increasing the fee even though they should).

I think it’s a bit hard to have that power because it plays on our conscience when someone can’t afford it. Then it’s a question of conscience – should I help you or not, even though I’m not allowed to

(D5, hospital)

Dietitians expressed that home-delivery of ONS was common and superior to having patients pick it up at the healthcare unit or at a pharmacy. The interviews reflected that dietitians had to be very involved regarding the delivery of ONS because this was a prerequisite for patients to drink it in the end. Even if the system of delivery was set by the region, dietitians could...
facilitate for patients; for example, by choosing home-delivery instead of self-pickup, even though it was more expensive for the hospital or by letting patients call them if they could not manage to order a refill delivery by themselves.

For those who suffer from the most severe dementia, I have put in a notification in my calendar to order a delivery every month because it’s no idea to even let them try. Then, I do it for them because then I know they’ll drink it (D13, primary healthcare)

Treating patients with ONS who were dependent on others (e.g., frail elderly with dementia or people with function disabilities) was described by one dietitian as ‘inducing an extra element of non-compliance’ (D12, hospital). Those situations meant that the dietitians had to inform and motivate home-care staff, personal assistants and family members to encourage them to serve ONS according to the prescription. In several interviews, the dietitians mentioned that the success of the ONS intake was often on the individuals surrounding the patient and how motivated they are when it comes to nutrition.

DISCUSSION

Shared tailoring and provision of support to facilitate ONS use are two important aspects when the interviewed dietitians prescribe ONS. The dietitians described having a very flexible approach towards the ONS prescription content, emphasising the importance of patient involvement. A patient-led and humanistic approach has previously been shown to be appreciated and perceived as helpful by patients in dietetic consultations. Individualising care, according to the patients’ needs and desires, as well as redistributing power to the patient, have been identified as important parts of a patient-centred care approach within dietetics.

One strategy for redistributing power to the patient, an ideal emphasised by the dietitians in this study, is to implement shared decision-making. In 1997, Charles et al. presented four characteristics of shared decision-making, namely that (i) it involves two parties, the healthcare professional and the patient, and (ii) both parties take steps to participate in the decision-making process for the patient’s care and treatment. Furthermore, shared decision-making implies that (iii) both parties share information [e.g., about treatment alternatives (healthcare professional) and illness narratives and values (patient)]. Finally, (iv) a decision is made, following both parties’ involvement and agreement. All these four steps were mentioned by the dietitians as important parts of the ONS prescription process. The ’at least two-party prerequisite’ (i) and ‘that both parties should take steps to participate in the treatment decision’ (ii) are clearly evident in the descriptions of the tailoring process. Moreover, the dietitians described how they shared information about alternative treatments when ONS was not an option and that patients shared views on the ONS acceptance and preferences for treatment alternatives (iii). Finally, a shared decision is made about prescribing ONS where ideally the patient is involved in selecting flavours/products and amount prescribed (iv).

This process of shared tailoring of the prescription and the highly individual preferences, as described by the dietitians, strengthens previous research on the value of having a wide ONS product selection from which to choose. Nonetheless, even if a person-centred care approach is desirable, this shared tailoring process might result in a prescribed amount that is lower than what is suggested as clinically beneficial such as at least 30 kcal day$^{-1}$ or 600 kcal day$^{-1}$. However, the dietitians expressed that they compensated for too low prescription amounts by, for example, intensifying their emphasis on food-based strategies. Similar to these results, in a literature review on nutritional interventions in older adults at risk of malnutrition, dietitian-combined nutritional counselling with ONS was most effective followed by dietitian-delivered nutritional counselling alone and, lastly, ONS alone.

Both result categories identified in this present study are closely connected to the discussion on compliance or adherence to ONS and contribute by presenting strategies perceived by dietitians as supportive for patients’ ONS use. As previously identified, both patients and dietitians found that counselling and support, beyond education, were important for improving adherence to the nutrition therapy. In the continuing discussion, we acknowledge the challenge faced by patients in initiating and continuing to drink ONS as a behaviour change problem. Thus, our findings will be discussed in relation to the Behaviour Change Wheel (BCW), which is a framework for characterising behaviour change interventions. In Figure 1, we have added our study findings to the BCW framework and present examples of strategies used by the dietitians to support the behaviour ‘to drink ONS’. In the red circle of the wheel, nine intervention functions are presented suggesting that the dietetic strategies can be understood as affecting patient capability, opportunity and/or motivation, which enable behaviour change. Several strategies mentioned by the dietitians, such as referring to ONS as medicines and the benefit of using ready-made ONS instead of powdered ones, have been identified before. By use of the lens of the BCW framework, we obtain a deeper understanding of why those strategies might enable behaviour change. The outer grey circle of the wheel comprises seven policy categories, which are actions implemented by authorities that support behaviour change. Policy categories often support the delivery of several intervention functions and examples are shown in Figure 1. In the interviews, at least two of the policy categories were described as affecting patient’s usage of ONS, namely fiscal measures and service provision. It is evident that the price subvention, as an effect of the Swedish tax system, was perceived as essential for the ONS therapy. The dietitians mostly described subvention as a facilitator for ONS usage; however, they stated that some patients still found the products to be too expensive. In line with those results, the cost of ONS has previously been identified as a barrier to using this treatment strategy.
for malnutrition and the generous subvention in Sweden probably widely affects how often ONS is prescribed as part of the nutrition therapy. Accordingly, the service provision of home delivery of ONS was identified by the dietitians as facilitating ONS usage. Some dietitians described how they impacted the extent of those policy categories; for example, choosing home-delivery instead of self-pickup. The remaining policy categories (communication/marketing, guidelines, regulation, legislation and environmental/social planning) and non-exemplified intervention functions (restriction and coercion) were not discussed during the interviews but might be of relevance. The use of a data-driven approach rather than a deductive one can serve as an explanation as to why not all parts of the BCW model were represented in the data.

A potential consequence of all efforts made by the dietitians when prescribing ONS might mean that a lot of time is spent on this task and that it is a high administration burden. From this point of view, having prescriber rights might serve as a drawback, leading to reduced amount of patient consultations and expanded waiting lists. However, when quantifying time spent by a small sample of renal dietitians in the USA, a limited amount of time was spent on ONS protocols. This area is still unexplored and needs to be studied further.

Taken together, our findings identify the role of dietitians as a behaviour change facilitator and the importance of patient involvement as two important parts when providing an ONS prescription. Studies have identified the dietetic professional as a solution to the challenging task of prescribing ONS, and this present study exemplifies dietitians' views on how to prescribe ONS successfully. From their perspectives, the ONS prescription in clinical practice is deeply intertwined with and flexibly adjusted, according to the patients' preferences and overall food intake. Those results show that the ONS prescription is seen as one part of a nutritional intervention, delivered from a person-centred care approach. This includes a combination of different components (e.g., tailored ONS prescription, food-based strategies and behaviour change strategies) and these are based on a thorough nutritional assessment and are monitored thereafter. Accordingly, we suggest that this dietitian-led nutrition therapy should be considered as a more complex process than just to provide ONS bottles 'as pills' to patients. However, in clinical trials, fixed amounts of prescribed ONS are often used, and limited focus is placed on describing the components of ONS interventions, indicating a potential underestimation of the complexity of delivering a successful ONS therapy. Although it is not possible to conclude from the present study that dietitian-led prescribing improves patient outcomes, those results can provide a deeper understanding of the prescribing process when performed by a nutrition professional and hopefully inspire prescribers in clinical practice and future research on this topic. When designing upcoming clinical trials with ONS, the intervention
needs to be carefully deliberated and described beyond the ONS products prescribed (e.g., brand name of ONS administered) into the procedure of prescribing (e.g., activities, processes, mode of delivery) and we suggest that the BCW framework is a helpful tool in this work.

Strengths and limitations

All four investigators were involved in the analysis process, identifying patterns and categories that enhance the credibility of the study.21 Performing the interviews face-to-face strengthens the findings because the dimension of communication through body language becomes included. Nevertheless, no triangulation of the data sources was made, and the inclusion of the patient perspective would have increased the validity.44 For example, a discrepancy has previously been identified between dietitians’ and older patients’ views on harmful effects of malnutrition.38 In the present study, we have described a dietitian-expressed ideal of patient involvement. However, we lack confirmation from patient experiences, which we consider as vital for fully understanding aspects of person-centred care and shared decision-making. By contrast to the dietitians’ statements in our study, the level of patient involvement in the diet-related decision-making was quite low in a previous study on patient-dietitian conversations,45 which further highlights the limitation of the missing patient perspective. Accordingly, an interviewer-effect must be considered, as well as the potential influence of having a dietitian, in her research-role, interviewing another dietitian about professional practice. This can affect what is revealed, and one risk is that the norm of prescribing ONS ‘appropriately’ might have been exaggerated. Interviewees are inclined to direct the interviewer’s attention towards what they think he or she will understand instead of, for example, the complexity of their experience.46 The Swedish welfare system and having the dietitian as the main professional prescribing ONS are context features that must be considered as affecting the transferability of the findings. However, including dietitians from different settings and backgrounds with a broad range of experiences of prescribing ONS makes the findings more transferable compared to when the interviewees, for example, are recruited from one clinical setting.

CONCLUSIONS

In the present study, providing a prescription of ONS can be understood as a sophisticated dietetic professional process, signified by shared tailoring and provision of support. The concept of shared decision-making together with behaviour change theory can help to explain the dietetic ONS prescribing process. The findings of our study allow for dietitians’ ideals and strategies on how to prescribe ONS to be made more visible, which can inform both clinical practice and clinical trials for future improvements in nutrition therapy aiming to address malnutrition.

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CONFLICT OF INTERESTS

The authors have no conflicts of interest.

AUTHOR CONTRIBUTIONS

All authors actively contributed to the conceptualisation and design of the study and the analysis of data. ELi conducted the interviews and took a leading role in performing the analysis and drafting the manuscript. All authors were involved in reviewing the draft manuscript and approved the final submitted for publication.

TRANSPARENCY DECLARATION

The lead author affirms that this manuscript is an honest, accurate and transparent account of the study being reported. The reporting of this work is compliant with COREQ guidelines. The lead author affirms that no important aspects of the study have been omitted and that any discrepancies from the study as planned have been explained.

PEER REVIEW

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REFERENCES

1. Arends J, Bachmann P, Baracos V, Barthelemy N, Bertz H, Bozzetti F, et al. ESPEN guidelines on nutrition in cancer patients. Clin Nutr. 2017;36:11–48.
2. Volkert D, Beck AM, Cederholm T, Cruz-Jentoft A, Goisser S, Hooper L. ESPEN guideline on clinical nutrition and hydration in geriatrics. Clin Nutr. 2018;38:10–47.
3. Gandy J, editor. Manual of dietetic practice, 6th edn. Hoboken, NJ: John Wiley & Sons; 2019.
4. Regulation (EU). No 609/2013 of the European Parliament and of the Council of 12 June 2013 on food intended for infants and young children, food for special medical purposes, and total diet replacement for weight control and repealing Council Directive 92/52/EEC, Commission Directives 96/8/EC, 1999/21/EC, 2006/125/EC and 2006/141/EC, Directive 2009/39/EC of the European Parliament and of the Council and Commission Regulations (EC) No 41/2009 and (EC) No 953/2009 Text with EEA relevance [Internet]. Bruselles: European Parliament, Council of the European Union [Cited 25th of August 2020]. Available from: https://eur-lex.europa.eu/legal- content/EN/TXT/HTML/?uri=CELEX:32013R0609&qid=1598358201084&from=EN.
5. Milne AC, Potter J, Vivanti A, Avenell A. Protein and energy supplementation in elderly people at risk from malnutrition. Cochrane Database Syst Rev 2009;CD003288.
6. McMurdo ME, Price RJ, Shields M, Potter J, Stott DJ. Should oral nutritional supplementation be given to undernourished older
people upon hospital discharge? A controlled trial. J Am Geriatr Soc. 2009;57:2239–45.
7. Grass F, Bertrand PC, Schafer M, Ballabeni P, Cerantola Y, Demartines N, et al. Compliance with preoperative oral nutritional supplements in patients at nutritional risk - only a question of will? Eur J Clin Nutr. 2015;69:525–9.
8. Jobse I, Liao Y, Bartram M, Uter W, Stelhe P, Sieber CC, et al. Compliance of nursing home residents with a nutrient- and energy-dense oral nutritional supplement determines effects on nutritional status. J Nutr Health Aging. 2015;19:356–64.
9. Stratton RJ, Elia M. Encouraging appropriate, evidence-based use of oral nutritional supplements. Proc Nutr Soc. 2010;69:477–87.
10. Cadogan CA, Dharamshi R, Fitzgerald S, Corish CA, Castro PD, Ryan C. A systematic scoping review of interventions to improve appropriate prescribing of oral nutritional supplements in primary care. Clin Nutr. 2020;39:654–63.
11. Seguy D, Hubert H, Robert J, Meunier JP, Guérin O, Raynaud-Simon A. Compliance to oral nutritional supplementation decreases the risk of hospitalisation in malnourished older adults without extra health care cost: Prospective observational cohort study. Clin Nutr. 2020;39:1900–7.
12. Dominguez Castro P, Reynolds CM, Kennelly S, Clyne B, Bury G, Hanlon D, et al. General practitioners’ views on malnutrition management and oral nutritional supplementation prescription in the community: A qualitative study. Clin Nutr ESPEN. 2020;36:116–27.
13. The Norwegian Health Economics Administration (Helso), Bläsept [Internet]. Tønsberg: Helso; 2020 [Updated 24th of June 2020, Cited 24th of November 2020]. Available from: https://www.hello.no/regelverk-og-takster/blareseptordningen-forhandsgodkjet-og-individuell-stonad/blaresept-og-individuell-stonad/blaresept/bla-sept/bla-sept.pdf.
14. Taylor N. Overview of oral nutrition supplements and their use. Br J Community Nurs. 2020;25:S12–S15.
15. Samuelsson L, Södergren M, Berggren E, Törnqvist L. 'Prevent undernutrition and prescribe oral nutritional supplements correctly': an educational intervention for district nurses. Prim Health Care Res Dev. 2019;20:e152.
16. Swedish Medical Products Agency. Speciallismedel. Rapport från Läkemedelsverket. Uppsala: Swedish Medical Products Agency; 2012.
17. Academy of Nutrition and Dietetics. Nutrition Terminology Reference Manual (eNCPT): Dietetics Language for Nutrition Care. Nutrition prescription [Internet]. Chicago, IL: Academy of Nutrition and Dietetics [Cited 26th of August 2020]. Available from: https://www.ncpon.org/pubs/encpt-en/codeNP-1-1.
18. Liljeberg E, Andersson A, Lovestam E, Nydahl M. Incomplete descriptions of oral nutritional supplementation interventions in reports of randomised controlled trials. Clin Nutr. 2018;37:61–71.
19. Malterud K. Systematic text condensation: a strategy for qualitative analysis. Scand J Public Health. 2012;40:795–805.
20. Giorgi A. The descriptive phenomenological method in psychology: A modified Husserlian approach. Ann Arbor, MC: Duquesne University Press; 2009.
21. Patton MQ. Qualitative research & evaluation methods: Integrating theory and practice, 4th edn. Thousand Oaks, CA: SAGE Publications Inc.; 2014.
22. National Board of Health and Welfare. Statistik om legitimerad hälso- och sjukvårdspersonal 2018 samt arbetsmarknadsstatus 2017. no 2019-9-6311 [Internet]. Stockholm: National Board of Health and Welfare [Cited 25th of August 2020]. Available from: https://www.socialstyrelsen.se/globalasets/sharepoint-dokument/artikelkatalog/statistik/2019-9-6311.pdf. (2019).
23. Swedish Association of Clinical Dietitians. Verksamhetsberättelse med ekonomisk redovisning. Verksamhetsåret 2019. Stockholm: Swedish Association of Clinical Dietitians; 2020.
24. Malterud K, Siersma VD, Guassora AD. Sample size in qualitative interview studies: guided by information power. Qual Health Res. 2015;26:1753–60.
25. Kvale S, Brinkmann S. Den kvalitativa forskningsintervjun (English title: InterViews: Learning the Craft of Qualitative Research Interviewing), 3rd edn. Lund: Studentlitteratur; 2014.
26. QSR International Pty Ltd. NVivo (Version 11). https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home. (2015)
27. Crabtree BF, Miller WL. Doing qualitative research. 2nd edn. Thousand Oaks, CA: SAGE publications Inc.; 1999.
28. Charles C, Gafni A, Whelan T. Shared decision-making in the medical encounter: what does it mean? (or it takes at least two to tango). Soc Sci Med. 1997;44:681–92.
29. Miche S, van Stralen MM, West R. The behaviour change wheel: a new method for characterising and designing behaviour change interventions. Implement Sci. 2011;6:42.
30. Hancock RE, Bonner G, Hollingdale R, Madden AM. ‘If you listen to me properly, I feel good’: a qualitative examination of patient experiences of dietetic consultations. J Hum Nutr Diet. 2012;25:75–84.
31. Morris A, Herrmann T, Liles C, Roskell C. A qualitative examination of patients experiences of dietitians’ consultation engagement styles within nephrology. J Hum Nutr Diet. 2018;31:12–22.
32. Sladddin I, Ball L, Bull C, Chaboyer W. Patient-centred care to improve diietic practice: an integrative review. J Hum Nutr Diet. 2017;30:453–70.
33. Reinders I, Volkert D, de Groot LCPGM, Beck AM, Feldblum I, Jobse I, et al. Effectiveness of nutritional interventions in older adults at risk of malnutrition across different health care settings: Pooled analyses of individual participant data from nine randomized controlled trials. Clin Nutr. 2019;38:1797–806.
34. Endevelt R, Gesser-Edelsburg A. A qualitative study of adherence to nutritional treatment: perspectives of patients and dietitians. Patient Prefer Adherence. 2014;8:147–54.
35. Lambert K, Mansfield K, Liles C, Roskell C. A qualitative examination of the experiences of renal dietitians and how they help patients with end stage kidney disease to understand the renal diet. Nutr Diet. 2018;76:126–34.
36. Michie S, Atkins L, West R. The behaviour change wheel: a guide to designing interventions. Lydney: Silverback Publishing; 2014.
37. Ginzburg Y, Shmilovitz I, Monastyrsky N, Endevelt R, Shahar DR, et al. Barriers for nutritional care in the transition from hospital to the community among older patients. Clin Nutr ESPEN. 2018;25:56–62.
38. Beelen J, Vasse E, Ziylan C, Janssen N, de Roos NM, de Groot LCPGM, et al. Undernutrition: who cares? Perspectives of dietitians and older adults on undernutrition. BMC Nutr. 2017;3:24.
39. Harris PS, Payne L, Morrison L, Green SM, Ghio D, Hallett C, et al. Barriers and facilitators to screening and treating malnutrition in older adults living in the community: a mixed-methods synthesis. BMC Fam Pract. 2019;20:100.
40. Hand RK, Albert JM, Sehgal AR. Quantifying the time used for renal dietitian’s responsibilities: a pilot study. J Ren Nutr. 2019;29:416–27.
41. Deutz NE, Matheson EM, Matarrese LE, Luo M, Baggs GE, Nelson JL, et al. Readmission and mortality in malnourished, older, hospitalized adults treated with a specialized oral nutritional supplement: A randomized clinical trial. Clin Nutr. 2016;35:18–26.
42. Neelmaat F, Bosmans JE, Thijis A, Seiddel JC, van Bochorst-de van Schueren MAE, et al. Post-discharge nutritional support in malnourished elderly individuals improves functional limitations. J Am Med Dir Assoc. 2011;12:295–301.
43. Cereda E, Cappello S, Colombo S, Klersy C, Imarisio I, Turri A, et al. Effectiveness of nutritional interventions in head and neck cancer patients undergoing radiotherapy. Radiother Oncol. 2018;126:81–8.
44. Pilnick A, Swift JA. Qualitative research in nutrition and dietetics: assessing quality. J Hum Nutr Diet. 2011;24:209–14.
45. Vaillancourt H, Légaré F, Lapointe A, Deschênes S-M, Desroches S, Desroches S. Assessing patients’ involvement in decision making
during the nutritional consultation with a dietitian. Health Expect. 2014;17:545–54.

46. Thorne S. Interpretive description. Walnut Creek, CA: Left Coast Press Inc; 2008.

SUPPORTING INFORMATION
Additional supporting information may be found online in the Supporting Information section.

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