

Process models in dietetic care

A comparison between models in Europe

Daniel Buchholz, Alexandra Kolm, Koen Vanherle, Marleen Adam, Kathrin Kohlenberg-Müller, Maaïke E. Roemeling-Walters, Daniela Wewerka-Kreimel, Christina Gast, Karoline Lange, Sabine Ohlrich-Hahn, Shelly Rachman-Elbaum, Eline Baete, Renate Heine-Bröring, Elisabeth Höld, Andrea Werkman

Abstract

Using a Dietetic Care Process (DCP) can lead to improved application of evidence-based guidelines and critical thinking in dietetics. One aim of the project Improvement of Education and Competences in Dietetics (IMPECD) is to develop a unified DCP for international educational purposes. Therefore, a comparison of European DCPs was needed.

A concise literature search and semi-structured interviews with experts representing the full EFAD (European Federation of the Associations of Dietitians) member states were conducted from June to October 2017.

16 out of 23 EFAD member states responded (70%) from which 13 indicated to use a DCP. Eight different DCPs were found, with four to six core steps and three graphical representations. In one country the use of a dietetic process is indicated by law.

The DCPs have more similarities than differences as they follow the same principles. Differences in language or form may not limit the improvement in collaboration and international exchange in dietetic practice. These results provide a good basis for the development of a unified DCP for educational purposes.

Keywords: process model, dietetic care, nutrition, dietetics, Europe, IMPECD

ical thinking, a more-focused documentation of dietetic care, and an increased acknowledgment of the value of dietetic care by other health care professionals [2]. For the purpose of this paper, the extensive term dietetics includes the term nutrition.

For dietitians, using a DCP is recommended by several professional associations such as the International Confederation of Dietetic Associations (ICDA) [3], the European Federation of the Associations of Dietitians (EFAD) [4] and the Academy of Nutrition and Dietetics (AND) from the USA [2, 5]. However, DCPs are not only used and recommended for dietetic care in practical settings, they are also used as a didactic tool for students. In fact, the Nutrition Care Process (NCP) developed by the AND has its origin as a didactic tool in dietetic education long before it was implemented and used as a quality instrument in applied dietetics [6, 7].

In Europe, several DCPs are being used [1, 8]. In 2012 EFAD reported the use of DCPs in eleven EFAD member states [9]. Currently, with an increase in cross-border mobility of dietetic professionals and patients in Europe, updated information on DCPs is needed. In 2015 five Universities of Applied Sciences from four European countries (Austria, Belgium, Germany and the Netherlands) started the Erasmus+ funded

Introduction

Healthcare is evolving and with this comes a demand for an increased evidence of treatment effectiveness and efficiency from everyone involved in health care. Standardized processes are seen as necessary to generate predictable outcomes and transparency in health care [1] including dietetic care. Using a Dietetic Care Process (DCP) for dietetic practice, research and education can lead to the improved application of evidence-based guidelines and crit-

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project Improvement of Education and Competences in Dietetics (IMPECD; www.impecd.eu). One central aim of IMPECD is to provide an international online collaboration platform to improve competences in solving clinical cases applying a unified European process model in education. Therefore, we needed a description and comparison on e.g. the content, structure, number of steps and graphical representation of DCPs used in Europe. To our knowledge the existence and usage of process models in dietetics in Europe has never been reported in a scientific publication.

Materials and methods

For the purpose of searching DCPs that are being used in Europe, a literature search and a qualitative study were conducted. For the literature search PubMed and Google were examined for publications referring to DCPs in Europe. Keywords used were nutrition, dietetics, therapy, prevention, care, and process. Research language was limited to Dutch, English and German.

For the qualitative study, semi-structured interviews with experts of the full member states of EFAD were conducted; for this purposive sampling was applied. The interview questions focused on the history of the development of the model, its backgrounds and its use, the content and number of steps and its graphical representation and finally the legal requirements. The interview questions are depicted in ♦Overview 1. The use of a DCP is defined as the first official publication and/or recommendation of that model by a National Dietetic Association (NDA) or university.

Experts were defined as presidents of an NDA and/or EFAD delegates of an NDA or a person nominated by either the president or EFAD delegate of an NDA. To do so, all 29 NDAs of the 23 EFAD full member states

Country (n = 16)	Interviewed representatives (n = 20)	Type of process model used	Used since (year)	Original name of the process model
Austria	1	own	2009	<i>Diätologischer Prozess</i> (♦ Figure 2)
Belgium	2	none	-	-
Denmark	2	NCP USA	2012	Nutrition Care Process
France	1	own	2006	<i>La Démarché de Soins Diététique</i> (♦ Abbildung 3)
Germany	1	own	2015	German-Nutrition Care Process (♦ Figure 4)
Greece	1	own	2002	unknown
Italy	1	none	-	-
Luxembourg	1	France	2006	<i>La Démarché de Soins Diététique</i> (♦ Figure 3)
The Netherlands	1	own	1985	<i>Diëtistisch Methodisch Handelen</i> (♦ Figure 5)
Norway	2	NCP USA	2015	Nutrition Care Process
Spain	1	none	-	-
Slovenia	1	none	-	-
Sweden	2	NCP USA	2012	Nutrition Care Process
Switzerland	1	NCP USA + own	2012	Nutrition Care Process + <i>Ernährungstherapeutischer Prozess</i> (♦ Figure 6)
Turkey	1	none	-	-
United Kingdom	1	own	2013	Model and Process for Nutrition and Dietetic Practice (♦ Figure 7)

Tab. 1: Characteristics of the Dietetic Care Process models used within the 16 member states, reported by the 20 representatives

“own” means the process model was developed by the National Dietetic Association. Due to the fact that some member states have two associations, the number of representatives is higher than member states.

were invited via e-mail to participate. Some member states of EFAD have more than just one association representing dietitians; therefore more NDAs than member states do exist.

In total, 20 interviews with representatives from the 29 NDAs were conducted from June until October 2017 via Skype® and were held in native language or English (♦Table 1). All experts gave oral informed consent by agreeing on the virtual interview appointment. During the interviews, conducted by trained interviewers, field notes were taken. All data gathered by open questions (♦Overview 1) were

analyzed by a trained analyzer (DB) following the basic principles of summary content analyses of Mayring [10]. To ensure the reliability, data again were discussed with two additional trained researchers (AK, AW) and compared for consistency. All interviewed experts were asked to send additional information of the DCP used in the country or association represented by the experts (further referred to as representatives). To ensure the validity, results of the qualitative structured interviews and the literature search were triangulated. All data collected were handled according to the German data protection law [11]. Ethical ap-

Process model	Used in	Graphical representation	Context factors in the graphical representation
<i>Diätologischer Prozess</i>	Austria	linear	Interdisciplinary teamwork
Nutrition Care Process	Denmark, Norway, Sweden and Switzerland	cyclic	1: skills & competencies, critical thinking, collaboration, communication, evidence-based dietetics, code of ethics, dietetics knowledge 2: economy, setting, health and social system
<i>La Démarché de Soins Diététique</i>	France, Luxembourg	linear	-
German-Nutrition Care Process	Germany	cyclic	1: clinical reasoning, ethical guidelines, intra- and interprofessional collaboration, evidence based dietetics 2: economy, setting, health and social system
unknown	Greece	unknown	unknown
<i>Diëtistisch Methodisch Handelen</i>	Netherlands	cyclic	-
Nutrition Care Process + <i>Ernährungstherapeutischer Prozess</i>	Switzerland, Bern	linear	1: knowledge, critical reflection of dietitians, documentation 2: patients/clients attitudes 3: interdisciplinary teamwork, dependents
Model and Process for Nutrition and Dietetic Practice	United Kingdom	elliptic	1: professional capabilities and scope of practice 2: organizational culture and influences 3: national and system influence

Tab. 2: Graphical representation and context factors of the eight process models used within the member states

proval for this study was not necessary according to the Austrian ethic committee of lower Austria [12].

Results

No information about dietetic models used in Europe, besides the NCP, was found in the literature search

on PubMed. From the Google search other literature sources, ranging from websites [4, 9, 13, 14] to publications in national journals of the National Dietetic Associations [2, 15, 16] and books [17–20], were found. These sources provided information on six DCPs used within the EFAD member states in four languages: Danish, Dutch, English,

and German (♦Table 1). However, the Danish model with a focus on nutrition counselling was not considered for further analysis as it will be replaced by the NCP [15].

For the qualitative study, in total 16 out of 23 member states (70%) responded positively and 20 representatives from the 29 NDAs (69%) were interviewed (♦Table 1). In addition to the six models identified by literature research, two more models (France and Greece) in dietetic care were revealed during the interviews. Thus, eight DCPs are used within 13 EFAD member states (♦Table 2, ♦Figure 1).

Based on these data it was found that in Denmark, Norway and Sweden only the NDAs representing the clinical dietitians reported the use of a DCP, while the NDAs representing the administrative dietitians reported that no model is used. Representatives from Belgium, Italy, Spain, Slovenia and Turkey indicated that no DCP is used (♦Table 1). Austria, Germany, the Netherlands, Switzerland, France and United Kingdom developed their own country specific models (♦Fig-

Overview 1: Open questions used in the interviews

1. Do you use one or more dietetic care models in your country?
2. What is/what are the names of the dietetic care models?
3. By whom and when was the model developed?
4. Is the DCP based on another model?
If so, what is the name of the model?
5. By whom is the model maintained?
6. What is the target group of the model?
7. In what setting is the model used?
8. What is the aim of the model?
9. Who uses the dietetic care model in your country?
10. Since when is the dietetic care model used in your country?
11. Who supports the usage of the dietetic care model in your country?
12. Has the DCP model to be used by law? Are there any written recommendations/ official statements e.g. by an NDA, ministry supporting the application of the model?
13. Why do you think it is important using the DCP model?

DCP = Dietetic Care Process; NDA = National Dietetic Association

ure 2–7), while in Denmark, Norway, Sweden and Switzerland the NCP developed in the USA is used. On the other hand, in Switzerland two models are being used (the NCP and the model developed in Switzerland) and in Italy no model is used (♦Table 1) but the NCP is said to be implemented. According to the representative from Greece a DCP developed by the Harokopio University Athens is used in Greece. However, no further information was given; therefore this model was not further analyzed and displayed in ♦Figure 8, but displayed in ♦Table 1 and 2. Various aspects about the importance of the use of a process model in dietetics, as being put forward by the representatives, are presented in ♦Overview 2.

Development and use of the process models

The history of the development of models varies considerably from one country to another (♦Table 2); the model developed in the Netherlands has been used since 1985 [19, 21, 22], while the model developed in Germany was published in 2015 [17]. The development of the DCPs in the UK and in Germany was influenced by the NCP [14, 17]. There was no information available if and to what extent other existing models influenced the development of the remaining five European models. From ♦Table 1 it is clear that the NCP is applied in five European countries, with Italy starting soon. The NCP originates from the 1970s from a primarily teaching model at the Pennsylvania State University and has been used in practice since 2003 [5, 6]. The process model developed in France is applied in France and Luxembourg. All other models are used in the country of origin only. In Switzerland two models are used. The “*Ernährungstherapeutischer Prozess*” is used for teaching purposes at Bern University [18],

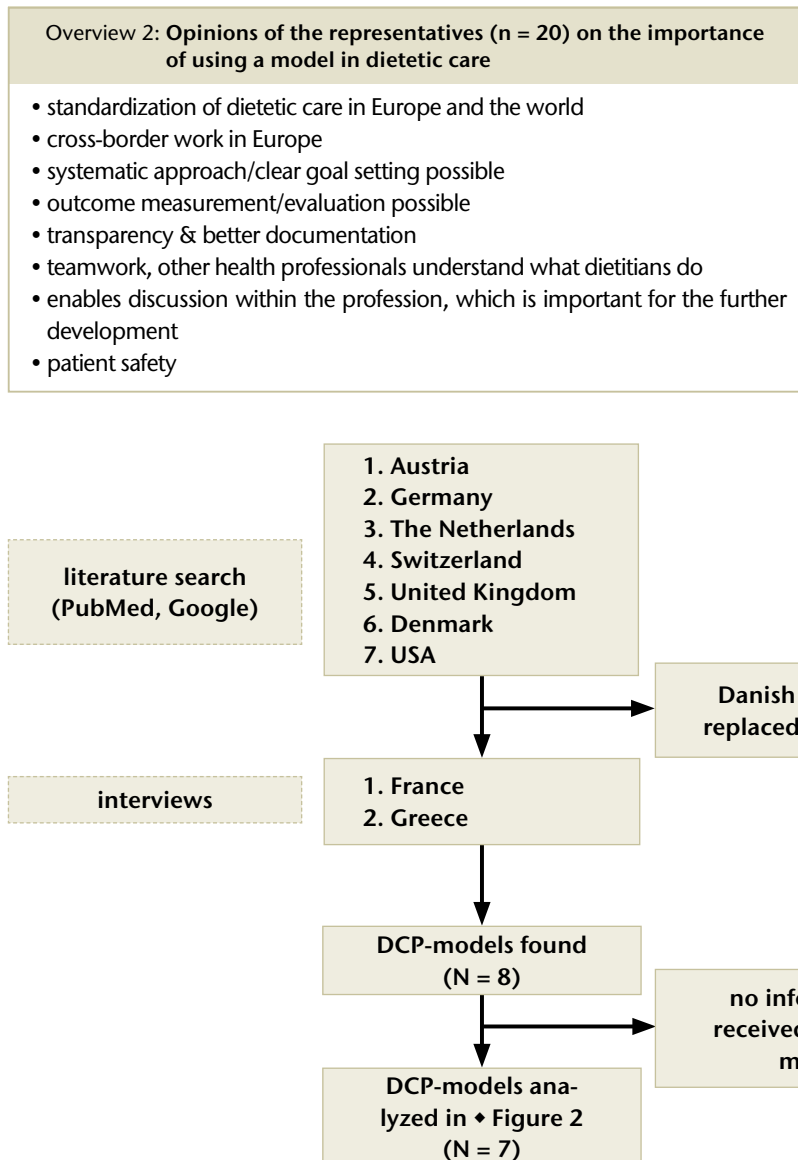


Fig. 1: Overview of dietetic care process models found that are used in Europe
 NCP = Nutrition Care Process

while the Swiss Association of Registered Dietitians recommends the NCP for dietetic practice.

Terminology and names of the models

In seven models the title includes either the word *dietetic(s)* or *nutrition* in the national language and, whenever necessary, in the English translation (♦Table 1, ♦Figure 8). The process model developed in the UK utilizes both terms. In six models the word *process* is used. The model developed in

the Netherlands uses the term *methodical action* and the model developed in France uses the term *approach*.

Structure: number of process steps

To focus on problem identification and problem solving in dietetic care, core steps of the models were defined. Core steps are process steps dealing with either problem identification or problem solving in dietetic care [2]. The number of steps differs between the models as represented

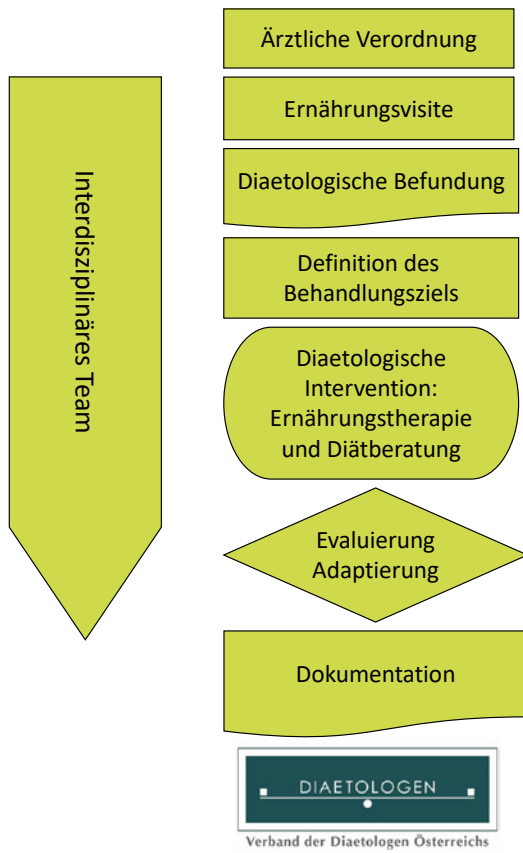


Fig. 2: DCP used in Austria: *Diätologischer Prozess* [13]

STEPS IN A DIETARY CARE PROGRAMME

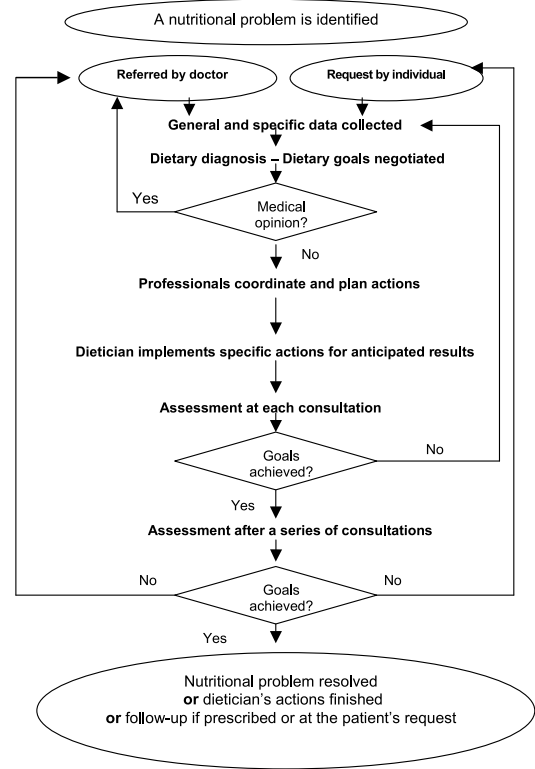


Fig. 3: DCP used in France: *La Démarché de Soins Diététique* [29]

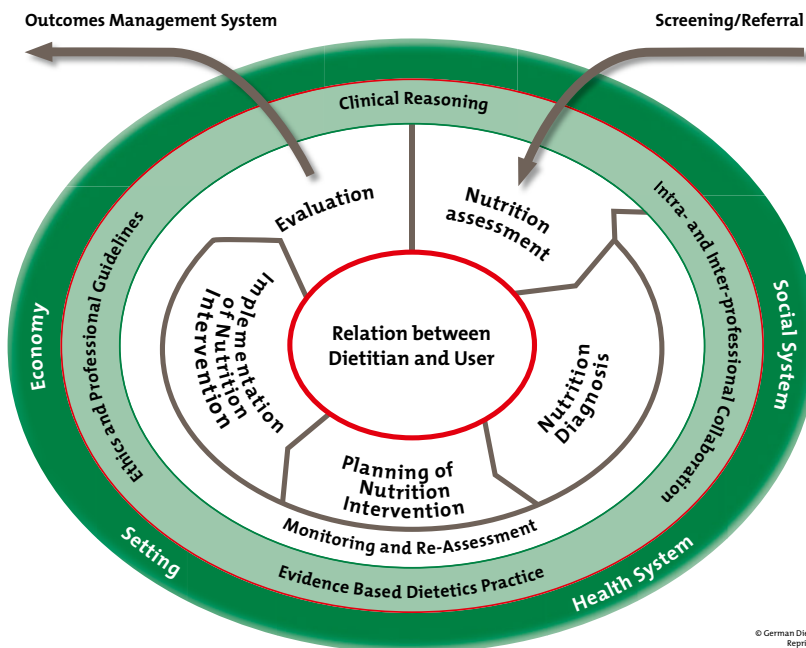


Fig. 4: DCP used in Germany: German-Nutrition Care Process [17]

in ♦Figure 8, in which the core steps are depicted within the grey box. The total number of steps ranges from four to six, due to splitting some steps. For example, in some process models, planning and implementation were incorporated in the process step *nutrition intervention*, while in other process models a planning step and a separate implementation of a nutrition intervention step were applied.

Graphical representation of the models

Three types of structuring the process were found: cyclic, linear and ellipse (♦Table 2). The steps of the models developed in Germany (♦Figure 4) and the USA follow a cycle with one start and one end point. In both models the starting point is *nutrition assessment* and the end point is *evaluation and monitoring*. The Dutch model is also a cycle (♦Figure 5) with the starting point *dietetic assessment* and the end point *evaluation*. However, the US model and the German model include two more steps, the *screening and referral system* before the *nutrition assessment* step and the *outcome management system* occurring after the *monitoring and evaluation* step. These steps are considered important but unlike the other steps they do not necessarily have to be done by a dietitian [5, 17].

In contrast to the cycle structure, the models developed in Austria, France and Switzerland follow a linear structure (♦Figure 2, 3 and 6) with one starting and one end point. The starting point in the Austrian model is *medical referral* and the end point is *documentation*. The starting point of the French model is a *referral by physician or individual request* and it ends with *final assessment*.

Thirdly, the UK model is elliptical (♦Figure 7) with two starting points and two endpoints. The starting point is either the *identification of nutritional need* or the

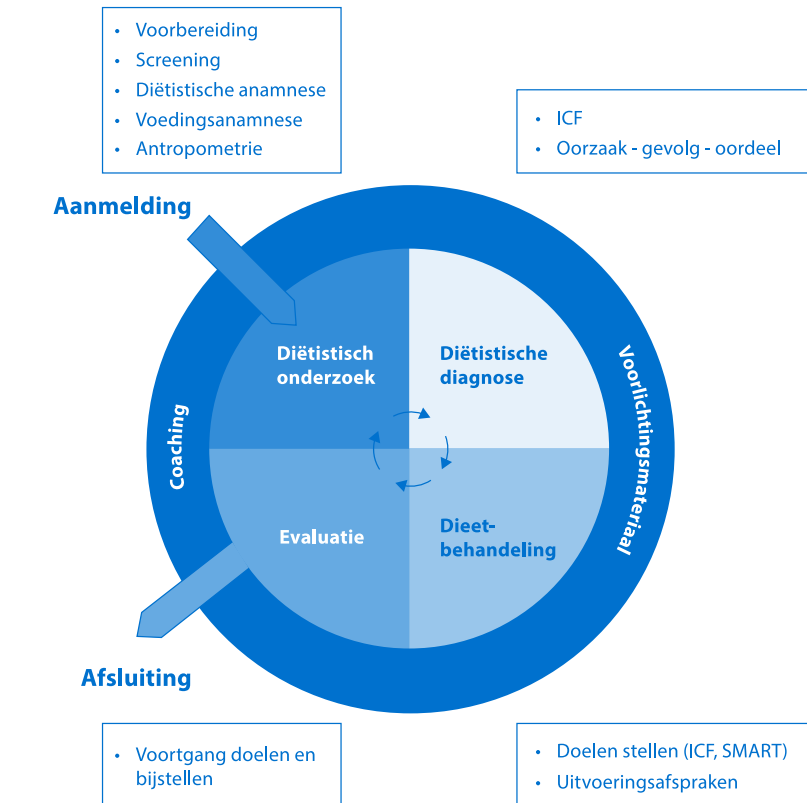


Fig. 5: DCP used in the Netherlands: *Diëtistisch Methodisch Handelen* [20]

assessment. The two ending points are *monitor and review* or *evaluation* [14].

Beside the (core) steps, some models show *context factors*. The USA, British, German, and Swiss models show the context where dietetic service is applied in (♦Table 2, ♦Figures 4–7). Incorporation of context factors into the model is considered important because the context influences the core process. In the USA, German and British models the context factors are illustrated as rings surrounding the core process; the first two models comprises two rings [5, 17], the latter contains three rings [14]. These rings refer to aspects such as the *social and health system, ethical codex* or *dietetic knowledge* [5, 14, 17]. The Swiss model [18] shows the context factors with three overlapping circles. The Austrian and Dutch models don't show context factors. Never-

theless, the Austrian model considers a multidisciplinary approach as essential (♦Figure 2).

Legal requirements

Whereas dietitians are the main target group of all process models mentioned [5, 13, 14, 16–18], the NCP (USA) addresses food and nutritional professionals [2, 5]. Moreover, the German model emphasizes that, depending on the setting and the legal requirements, all professionals working in the field of dietetics should use the model to ensure the delivery of high quality nutrition care [17].

To our knowledge, the only process that is mandatory in Europe is the Austrian one which is regulated by law for medical technical professions, such as dietitians in Austria [23]. Notably, the legal requirement stated by law does not explicitly refer

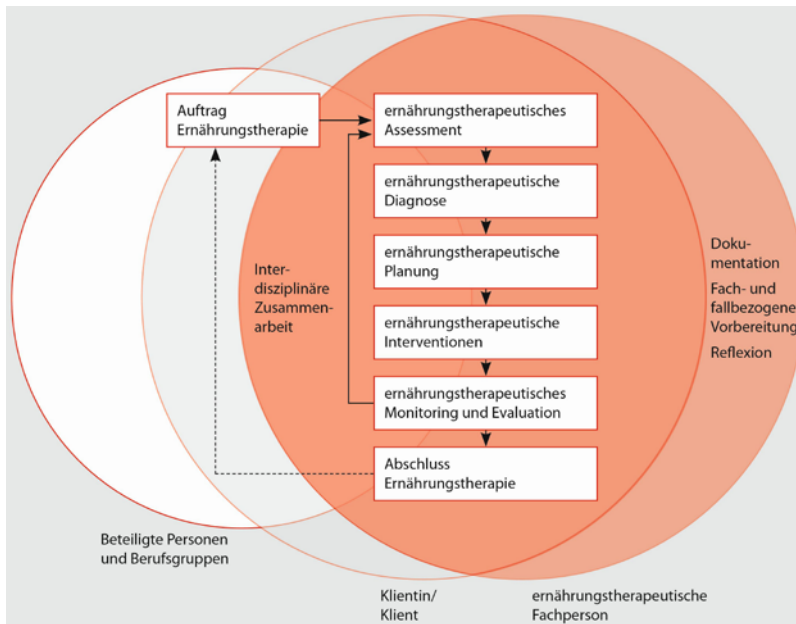


Fig. 6: DCP used in Switzerland at University of Applied Sciences Bern: Ernährungstherapeutischer Prozess [18]

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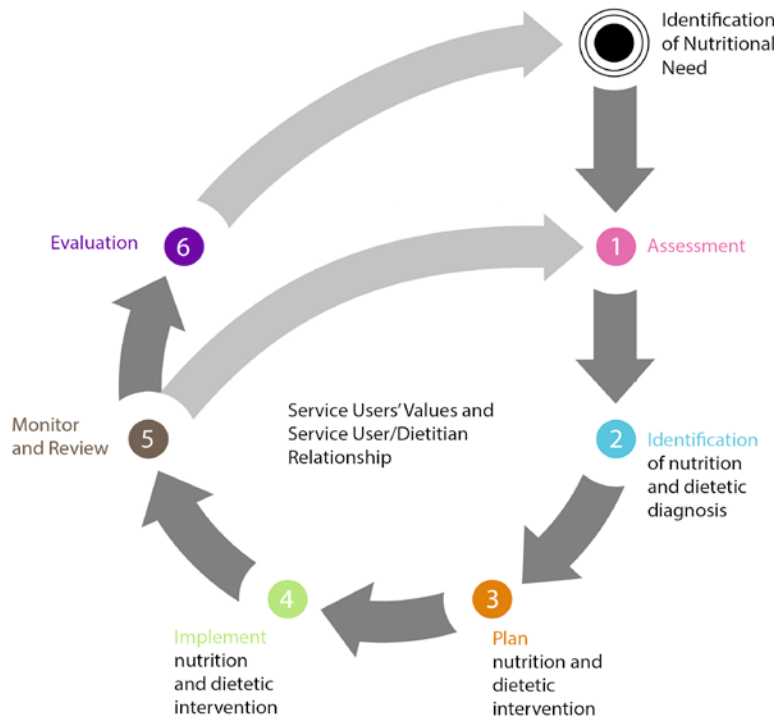


Fig. 7: Core steps (without context factors) of the DCP used in United Kingdom: Model and Process for Nutrition and Dietetic Practice [14]

to the Austrian model; it describes the principals of the core steps of the Austrian process without mentioning the name of the model.

In all other countries, the NDAs recommend and support the usage of the country specific model. No other representative reported legal requirements in respect that neither a DCP nor a model must be used. However, in some countries, e.g. Germany and the Netherlands, the process has been adopted in several guidelines relevant for dietetic practice or the training of dietitians [20, 24–27].

Discussion

The aim of this research was to describe and compare DCPs used across Europe. Compared to a previous EFAD investigation [9], three more countries reported the use of a DCP. Thus, there is progress in Europe in the usage of DCPs in dietetics within the last years.

The comparison of the DCPs shows that there are more similarities than differences. Similarities are mostly found in its circular and methodological process, with four main core steps which refer to the Plan Do Check Act (PDCA) cycle [28]. Nevertheless, one remarkable difference is the consideration of the explicit context factors in the models used in Germany, Switzerland, UK and USA.

So, based on these findings a unified European DCP model for educational purposes is possible. When it comes to the legal requirements, only in Austria the law for medical technical professions such as dietitians refers to the use of specific process steps [23]. However, in some countries the DCP is part of guidelines and recommendations for dietetic practice and/or dietetic training [20, 24–27, 29].

Limitations

Some limitations of the study were that due to the fact that the representatives were a nominated sample,

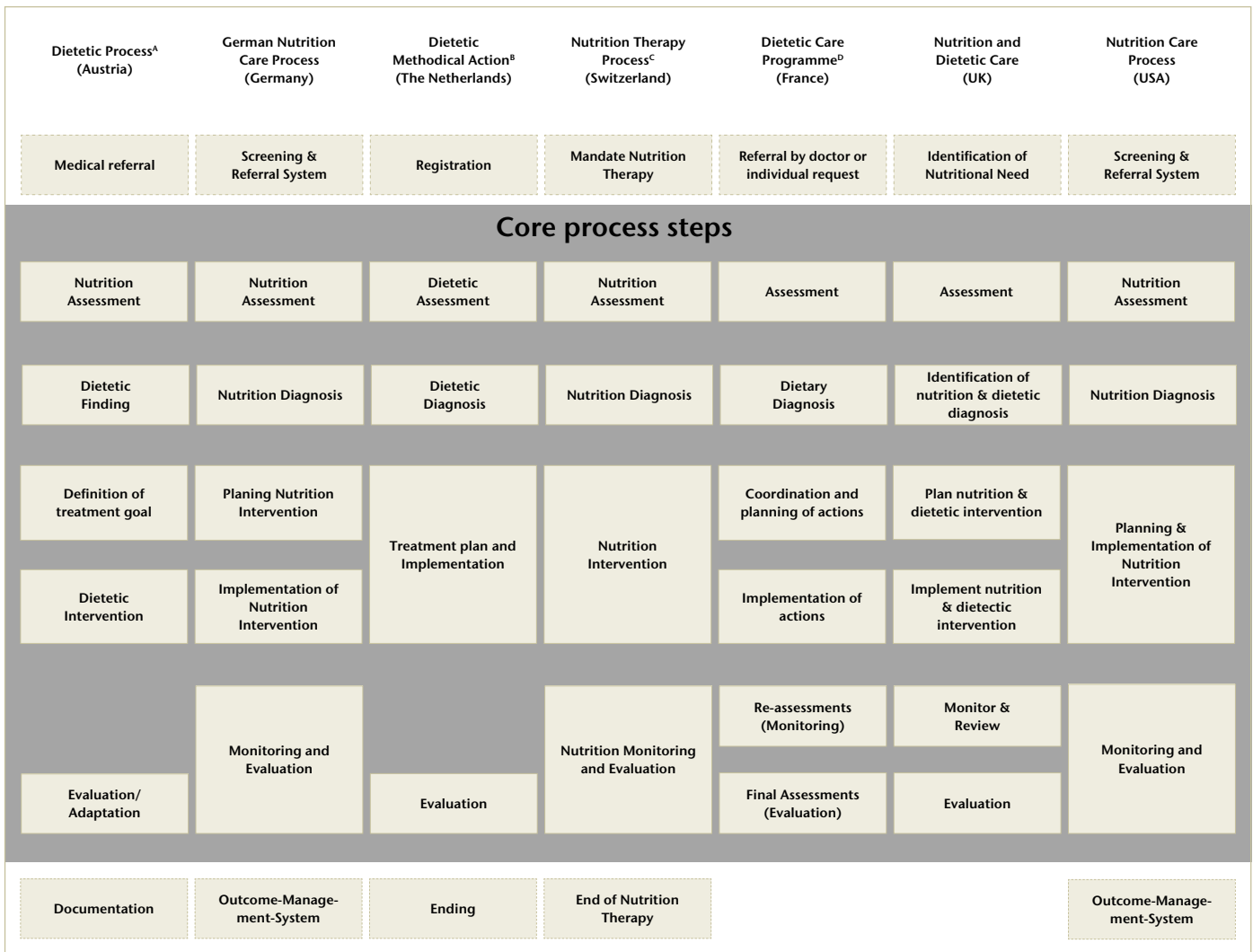


Fig. 8: Process steps of Dietetic Care Process models used in Europe

^A Diätologischer Prozess

^B Diëtistisch Methodisch Handelen

^C Ernährungstherapeutischer Prozess

^D La Démarché de Soins Diététique

Translations for the French and Swiss (Bern) by country's National Dietetic Association (NDA); translations for Austrian and Dutch version by authors; all other published as such in the literature. Since no details were available for the Greek model, it is not displayed in this figure.

some aspects and information might have been missed that would have been mentioned by others. Moreover, the sixteen different languages spoken within EFAD member states limited the literature search. As mentioned before, most publications referring to DCPs are in the national languages and published in national magazines. These types of publications are not indexed in, nor accessible on international databases such as PubMed or even Google. For instance, although the model in

the Netherlands was developed in 1985, no international article was published since then. Thus, it cannot definitely be concluded that beside the eight models found, other models in dietetic care exist and are used in Europe. In addition, translating from the languages of origin into English could be associated with language bias.

Furthermore, additional research on underlying concepts e.g. the holistic approach of the International Classification of Functioning, Health

and Disability (ICF) versus biomedical approach used in the NCP might be useful, as these concepts influence different process steps, e.g. stating the *nutrition diagnosis* [2, 17, 27, 30].

Conclusion

The overall similarities between the process (models) form a solid base to work towards a unified model for dietetic education and practice in

Europe. Such a unified model could improve the international collaboration of dietitians and hence the cross-border mobility of dietetic professionals.

Nonetheless, all European countries have different health and education systems as well as legal requirements and dietitians therefore may work on different levels of professional autonomy in Europe. Thus, such a future DCP must consider the variety within the European countries and therefore also needs to be open and flexible to a certain degree to account for the in-between country differences.

Besides, developing a unified DCP requires a deeper understanding of the in-depth concepts underlying the models used in Europe, requiring a common terminology. Since at present the concepts of terms like dietetics, nutrition, diagnosis or finding are not clearly defined on a European level and only a few countries have defined these terms when used in the context of a dietetic care model, this needs some further investigation [2, 14, 17, 31].

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Disclosure

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Conflict of Interest

Dr. Buchholz is EFAD delegate of the “*Verband der Diätassistenten*” (German Association of Dietitians, VDD) and co-author of the “*Manual for the German-Nutrition Care Process*” (G-NCP) (2015).

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Dr. Daniel Buchholz MPH ^{1,7}

FH-Prof. Alexandra Kolm, MSc ²

Koen Vanherle, MSc ³

Marleen Adam ³

Prof. Dr. Kathrin Kohlenberg-Müller ⁴

Maaïke E. Roemeling-Walters, MSc ⁵

FH-Prof. Daniela Wewerka-Kreimel, MBA ²

Christina Gast ⁴

Karoline Lange, MSc ⁶

Sabine Ohlrich-Hahn ⁶

Dr. Shelly Rachman-Elbaum ⁶

Eline Baete ³

Dr. Renate Heine-Bröring ⁵

FH-Prof. Dr. Elisabeth Höld ²

Dr. Andrea Werkman ⁵

¹ School of Dietetics
 Johannes Gutenberg-Universitätsmedizin
 Mainz

² University of Applied Sciences St. Pölten
 Department of Health Sciences
 Studiengang Diätologie
 Matthias-Corvinus Str. 15, 3100 St. Pölten/
 Austria

³ Artesis Plantijn University College Antwerp
 Department of Science and Technology
 Nutrition and Dietetics Programme
 Kronenburgstraat 47, 2000 Antwerp/Belgium

⁴ University of Applied Sciences Fulda
 Department of Nutritional, Food and Consumer Sciences
 Leipziger Str. 123, 36037 Fulda

⁵ Hanze University of Applied Sciences
 School of Healthcare studies
 Nutrition and Dietetics programme
 Petrus Driessenstraat 3, 9714 CA Groningen/
 The Netherlands

⁶ University of Applied Sciences Neubrandenburg
 Section of Dietetics
 Department of Agriculture and Food Sciences

⁷ daniel.buchholz@unimedizin-mainz.de

References

1. Connor SL, (2014) Solving our patients nutrition problems. *J Acad Nutr Diet* 114: 1872–1873
2. Swan WI et al. (2017) Nutrition Care Process and model update: toward realizing people-centered care and outcomes management. *J Acad Nutr Diet* 117: 2003–2014
3. International Confederation of Dietetic Associations. ICDA Strategic Plan 2017–2020. (2013). URL: www.internationaldietetics.org/Downloads/ICDA-STRATEGIC-PLAN-2012-TO-2016.aspx Zugriff 21.03.18
4. European Federation of the Associations of Dietitians. Vision paper: the implementation of a Nutrition Care Process (NCP) and Standardized Language (SL) among dietitians in Europe. (2014). URL: www.efad.org/media/1186/ncp-sl_vision_paper_final_mar_2014.pdf Zugriff 14.12.17
5. Lacey K, Pritchett E (2003) Nutrition Care Process and Model: ADA adopts road map to quality care and outcomes management. *J Am Diet Assoc* 103: 1061–1072
6. Hammond MI, Myers EF, Trostler N (2014) Nutrition care process and model: an academic and practice odyssey. *J Acad Nutr Diet* 114: 1879–1894
7. Ohlrich-Hahn S, Selig L, Buchholz D (2017) Der German-Nutrition Care Process. Ernährungsprobleme systematisch lösen. *Ernährungs Umschau* 64(10): M568–M579
8. Papoutsakis C, Orrevall Y (2012) The use of a standardized language among dietitians in Europe: results and conclusions from a questionnaire by EFAD PPC. *DietistAktuell* XXI(1)
9. European Federation of the Associations of Dietitians. Report on knowledge and use of a nutrition care process & standardised language by dietitians in Europe. (2012). URL: www.efad.org/media/1185/ncp_sl_report.pdf Zugriff 15.11.17
10. Mayring P. Qualitative Inhaltsanalyse. In: Mey G (Hg). *Handbuch Qualitative Forschung in der Psychologie*. VS Verlag für Sozialwissenschaften, Wiesbaden (2010)
11. Bundesgesetzblatt Jahrgang 2017 Teil I Nr. 44, Gesetz zur Anpassung des Datenschutzrechts an die Verordnung (EU) 2016/679 und zur Umsetzung der Richtlinie (EU) 2016/680 (Datenschutz-Anpassungs- und -Umsetzungsgesetz EU – SDAnpUG-EU), Bundestag, Bonn (2017)
12. Ethikkommission für das Bundesland Niederösterreich, NÖ Ethikkommission; Bewertung der Ethikkommission-Relevanz, Landesregierung. Niederösterreich (2017)
13. Verband der Diätologen Österreichs. Diätologischer Prozess. URL: www.diaetologen.at/diaetologie/diaetologischer-prozess/ Zugriff 21.03.18
14. British Dietetic Association. Model and Process for Nutrition and Dietetic Practice. (2016). URL: www.bda.uk.com/publications/professional/model_and_process_for_nutrition_and_dietetic_practice Zugriff 21.03.18
15. Winther E (2013) Model for individuel diätbehandling og kostvejledning. *Diätisten* (121). 5–7
16. Schuurman C (2015) Methodisch handelen: graag nog SMARTER! *Nederlandse tijdschrift voor voeding & diëtetiek* 70: 14–19
17. Verband der Diätassistenten – Deutscher Bundesverband e. V. VDD-Leitlinie für die Ernährungstherapie und das prozessgeleitete Handeln in der Diätetik. Band 1. Manual für den German-Nutrition Care Process. VDD (Hg), Pabst Publisher, Lengerich (2015)
18. Rufener A, Jent S. Der ernährungstherapeutische Prozess. In: Rufener A, Jent S (Hg). *Der Ernährungstherapeutische Prozess*. hogrefe, Bern (2016)
19. Visser WK et al. Eenduidig taalgebruik bij het diagnostisch en therapeutisch handelen van de diëtist. In: Former M et al (Hg). *Informatorium voor Voeding en Diëtetiek*. Springer (2014)
20. Leibbrandt A et al. Het diëtistisch consult. Vol. 5e druk. Boom uitgevers, Amsterdam (2016)
21. Nederlandse Vereniging van Diëtisten (1988) POR Probleemgeoriënteerde Registratie. Een handleiding voor het gebruik van het POR-Model. *Nederlands Tijdschrift voor Diëtisten* 43: S1–S12
22. Nederlandse Vereniging van Diëtisten. Probleemgeoriënteerde registratie van belang voor de diëtist. Intern Rapport. Werkgroep Introductie POR, Oss (1985)
23. Bundesministerium für Gesundheit und Frauen. Verordnung der Bundesministerin für Gesundheit und Frauen über Fachhochschul-Baccalaureatsstudiengänge für die Ausbildung in den Gehobenen medizinisch-technischen Diensten (FH-MTD-Ausbildungsverordnung - FH-MTD-AV). Anlage 4: Fachlich-methodische Kompetenzen des Diätologen oder der Diätologin, Anlage 13: Mindestanforderungen an die praktische Ausbildung zum Diätologen oder zur Diätologin. (2018)
24. GKV-Spitzenverband et al. Rahmenempfehlung über die einheitliche Versorgung mit Heilmitteln gemäß § 125 Abs. 1 SGB V. (2017)
25. Klein S et al. Weißbuch Adipositas. MWV Medizinisch Wissenschaftliche Verlagsgesellschaft mbH & Co. KG, Berlin (2016)
26. Ohlrich S, Brumm J. Diätassistenten kompetenzorientiert ausbilden. Grundlagen und Empfehlungen für ein bundesweites Curriculum. Pabst Science Publishers, Lengerich (2013)
27. Nederlandse Vereniging van Diëtisten. Artsenwijzer Diëtetiek. URL: www.artsenwijzerdiëtetiek.nl/ Zugriff 20.03.18
28. Shewhart WA. *Statistical method from the viewpoint of quality control*. Dover Publ., New York (1986)
29. HAS and ADLF (Haute Autorité de Santé; Association des Diététiciens de Langue Française). *Dietary consultation with a dietician. Quick reference guide*. (2006). URL: www.has-sante.fr/portail/upload/docs/application/pdf/dietary_consultation_-_quick_reference_guide_.pdf Zugriff 21.03.18
30. World Health Organization. *International classification of functioning, disability and health (ICF)*. (2001). URL: www.who.int/classifications/icf/en/ Zugriff 21.03.18
31. Valentini L et al. (2014) Suggestions for terminology in clinical nutrition. *e-SPEN Journal* 9: e97–e108

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