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Procedia Computer Science 181 (2021) 793–802

Procedia Computer Science

www.elsevier.com/locate/procedia

CENTERIS - International Conference on ENTERprise Information Systems / ProjMAN - International Conference on Project MANagement / HCist - International Conference on Health and Social Care Information Systems and Technologies 2020

What are Dietitians and Nutritionists doing on social media? A proposal of an online survey

Inga Saboia[a,b*], Ana Margarida Pisco Almeida[b], Pedro Sousa[c,d], Cláudia Pernencar[e,f], Rui Silva[g,h]

[a]*UFC Virtual, Federal University of Ceará, Brazil*
[b]*Department of Communication and Art/DigiMedia, University of Aveiro, Portugal*
[c]*Center for Innovative Care and Health Technology (ciTechCare), Polytechnic Institute of Leiria, Portugal*
[d]*Health Sciences Research Unit: Nursing (UICISA: E), Nursing School of Coimbra (ESEnfC), Portugal*
[e]*NOVA Institute of Communication (ICNOVA), Faculty of Human and social Sciences – New University of Lisbon, Portugal*
[f]*Arts and Design Research Lab (LIDA), Polytechnic Institute of Leiria, Portugal*
[g]*Ordem dos Nutricionistas;* [h]*Faculty of Nutrition and Food Science, University of Porto, Portugal*

Abstract

Registered Dietitians and Nutritionists (RDNs) have been taking on a role as communicators on social media. This phenomenon is in line with nutritional culture defending the right way of eating based on their scientific knowledge. It is necessary to understand new dynamics between RDNs and social media users. Under this context an online survey was created to understand how these health professionals carry out their role on social media to promote health issues, to become known, to communicate with their followers and patients. This paper describes the creation process of the online survey to be submitted to RDNs from Portugal using Design Thinking method.

Keywords: eHealth, Social Media, Digital Media, Dietitians, Nutritionists, Survey building, Design Thinking, Scientific Methodology, Facebook, Instagram.

* Corresponding author. Tel.: +351 965074141.
E-mail address: ingafsaboia@gmail.com

10.1016/j.procs.2021.01.232

1. Introduction

Social media is an umbrella term used to designate digital applications that allow users to not only search but also produce online content. A large number of people are currently using digital media to create content in multiple areas [1], and registered dietitians and nutritionists (RDNs), in particular, use Instagram to interact to a large audience [2], [3]. This trend is not limited to digital media and there is a growing nutritional science culture that legitimates the correct way to eat, changing the relationship between people and food as a whole [4]. Dumas et al. (2018) also perceived the importance of the users, uses and effects of social media on dietetic practice. These authors carried out a literature review to identify the individuals using social media in dietetic practice, their purposes, the effects of these actions, the barriers and facilitators that influence this usage and the gaps in literature. According to Dumas et al. (2018), a small number of studies have focused on RDNs who are using digital media to communicate professionally with the public as social media users. These are related to health interventions (n=2), descriptions about a web application (n=1), content analysis (n=1) and expert opinions (n= 7). The last type of work can be divided into two topics: the first relates to the opportunities and advantages of social media use for RDNs who are using digital media to communicate professionally with the public and the second focuses on professional and ethical concerns. Thus, these expert opinion papers deal with the following subjects: the importance of establishing professional and ethical conduct on digital media [5], [6]; tips and tricks reported regarding Pinterest [7]; descriptions that RDNs have used online open courses to educate a massive audience [8]; the dos and don'ts of social media [9]; preparation for RDNs to utilize social media [10]; the opportunities, challenges and best practices on social media for RDNs [11]; explanations of online content copyright [12] and advice from the American Dietetic Association on using social media for communicate with them [13]. Results studies of Dumas et al.'s (2018) show that there are more works that intend to guide RDNs' behavior on social media than those that describe what actually happens. This is particularly noteworthy with regards to the absence of studies with quantitative analysis.

Other authors [14]. tried to understand how RDNs are using digital media to communicate with the larger public. Their most important concern was to deepen the knowledge of the RDN profiles using social media in their professional practice, the most common social media platforms, their reasons for use, and their common behavior and attitudes. The former study [14] allowed the identification of two important studies in this domain. One was conducted in the United Kingdom and Ireland [15], and the other is a professional report from Australia [16]. The former study was the result of an online survey with 1005 responses (753 RDNs and 252 students from the area - SDs). The wide reach of social media for this target public is worth noting: 80% of RDs and 96% of SDs are considered users of this technology. Among these users, 41% of RDs use social media for their practice, and 45% of SDs use them for educational goals. Furthermore, most of the participants (66%) agree that social media contribute to promoting their profession. However, 36% of the respondents expressed concern on the role of social media in establishing and maintaining the confidence of public in their activities. This study is very interesting, but it presents partial results and lacks some details, such as individual social media use and usage frequency.

The second work, the Appetite Communications and Dietitian Connection (2018) report, is a longitudinal online survey of Australian RDNs in 2014, 2016 and 2018. The version from last year received responses from 311 RDNs: their average age is under 40 (78%), the average length of a university degree course is five years (51%) and the two main areas of professional specialty are hospital and private practice (respectively 29% and 22%). The study highlighted the character of their usage and their confidence in social media: 95% of RDNs access social media (for educational and professional purposes), 80% check these channels at least four times a day, 79% are confident users and 54% have a professional social media page. The most popular channels used for professional purposes are: LinkedIn, Instagram, Facebook, Blogs, Twitter, YouTube and Pinterest. The most searched content on social media relate to: nutrition news, general nutrition information, recipes, professional development events, food and product reviews, research and patient resources. The types of information that RDNs share on social media involve: personal, professional networking, professional development, exchange of information with peers, nutrition information provided to the public, technological, promotion of one's own organization and promotion of products or services. The study also addressed questions about the timing of social media engagement.

As the results from the literature reviews did not answered the question 'How are RDNs using digital media to communicate with their public?', the need to create an online survey emerged. The current paper describes the process of producing this survey and suggests that this instrument can be used for other researchers with several

purposes. One main result expected from this study is to provide a proposal that can be adjusted and employed to explore the situations in other countries or other health professional contexts. The development of this instrument is presented in 8 phases, which are explained in detail in the next section.

2. Method

Considering the lack of quantitative analyses detected with previous work, studies involving a large sample of participants, an initial step in this research was established, a partnership with the Portuguese professional organization of RDNs – Portuguese Council of Nutritionists. This agreement was made as follows: the researchers produced an online survey; they undertook preliminary studies to test the survey; the Order analyzed the survey regarding the relevance and suitability of the questions. The Order then suggested new questions and answers or changes thereof; the survey was submitted to all RDNs registered in the Portuguese Council of Nutritionists through e-mail; and the results were analyzed by the researchers and then communicated to the Order and general public.

The design of this research instrument resulted in an effort from the researchers and the RDNs Order of Portugal, and followed components of a survey method plan [17]. The research team established the goals and characteristics of the survey in order to collect numeric data to characterize a phenomenon: RDNs using social media in their dietetic practice, habits and attitudes. The online submission method was chosen, because it was possible to access an e-mail database of all the RDNs in the Portuguese Order. Thus, the sample is known: there are 4211 actives RDNs in Portugal, and this would be a cross-sectional instrument.

After these initial steps, the research team used and adapted Design Thinking approach [18] for the scientific methodology. Each phase of the referred method was considered a work phase, in which it is similar to one component of the survey method plan was carried out [17]. The method is flexible and dynamic and researchers are familiar with in their daily creative process routine. This was grounded in a Double Diamond Model from the Design Council of United Kingdom[19] – Figure 1.

Every process that uses Design Thinking should start with a challenge that should be broken down into four phases. In each, it is possible to use different methods to explore, share and build solutions. This study followed these phases showed below: a) Discover: This step is used to understand what the problem is; for this, it takes advantage of initial findings from the literature review or desk research (through the Design Thinking Method) of previous works from this research team; b) Define: Following the literature review, the knowledge gaps and some questions were identified; c) Develop: Experts from several areas were invited to participate in the conception of the survey through text formulation adapted to the field of nutrition as well as the selection and ordering of the questions; d) Deliver: In accordance with the Double Diamond Model, this phase involves testing solutions on a small scale, discarding those that do not work and improving those that do. This step generates a solution to the initial challenge.

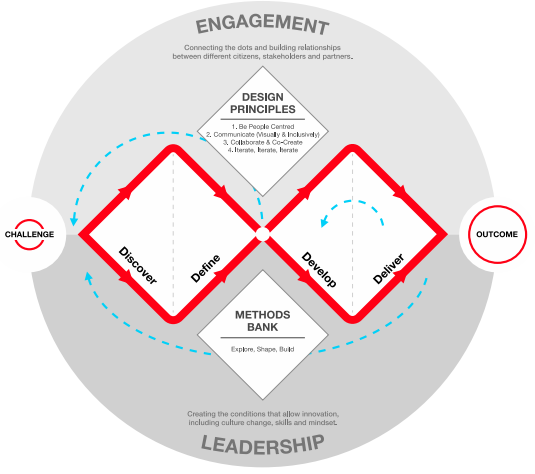

Figure 1: Diagram of the Double Diamond Model created by the Design Council of United Kingdom

The online survey was built using a continuous development process – Table 1– that passed through consecutive phases. Each one influenced another with partial results that were transmitted as a base. This occurred in the majority of the stages, although the delivery phase was concomitant with the development phase, due to the extensiveness of the latter.

Table 1: Development process of the survey – Macro phases of Design Thinking

Design Thinking Phases	Design Thinking Methods	Components of a survey method plan	Partial results of each phase
Discover	Desk research	Literature review	2 papers that approach numeric dimension of this phenomenon
Define	Insight cards and Brainstorm	Conception of questions and answers	A set of questions and answers written on a small pieces of paper
Develop	Affinities diagram and Heuristic analysis with experts (Section 2.3 (1))	Expert opinion of information and communication technologies (ICT) area – 3 individual session	An online form with a set of questions and answers that were selected, ordered and grouped into a common content area based on their thematic affinity
	Heuristic analysis with experts (Section 2.3 (2))	Expert opinion of information and communication technologies area – 2 experts reviewed the previous instrument	Online form was changed to cover a current and relevant thematic area
	Heuristic analysis with experts (Section 2.3 (3))	Expert Opinion of scientific methodology area – 1 expert	Online form was improved to be concise and clear, as well as present suitable questions and answers format
	Heuristic analysis with experts (Section 2.3 (4))	Expert Opinion of nutrition area – 1 university teacher of a Nutrition graduate course	Online form was revised to suit nutrition area
	Heuristic analysis with experts (Section 2.3 (5))	Expert Opinion of Portuguese Council of Nutritionists - 2 RDNs	Online form was reviewed to adapt their terminology for the target public and to add pertinent questions and answers
Deliver	Tests of use	Pilot test (n = 30) in Portugal and Brazil	Consolidated online form

2.1. Discover through a more in-depth literature review

Discover phase was completed by literature review method, that is also called “Desk Research” in Design Thinking Process [20]: The first study [15] was very interesting, but it did not publish survey and present partial results. Thus, the researchers asked the authors of this study to share the entire survey. After analyzing it, the researchers concluded that the instrument was not suitable for submission to their target audience (i.e. RDNs from Portugal) because, the survey was too broad and had 22 major questions with themes – such as privacy – that are not related to the work. Furthermore, it presented a long list of diverse social media channels that do not have great prominence. These points contradict one of the main purposes, the survey should be short and completed quickly. Some parts of this survey [15], including the demographic status and social media in dietetic practice, were adapted. The second study [16] was more concise. It examined the following aspects: how, when and where dietitians use social media; their preferred platforms; their purpose of use and their most-sought information on social media. Therefore, the research is important, but it lacked details on how RDNs communicate with an online audience.

The researchers analyzed the pros and cons of both studies, Appetite Communications & Dietitian Connection, (2018) and Knight et al., (2017), in order to provide an instrument that is more concise, clear and suitable for RDNs from Portugal. This instrument takes the form of an online survey that can be answered quickly, but also has relevant questions to describe digital media usage by health professionals. This tool can be carried out in many different contexts, such as in other countries and health-related professions. With this in mind, the researchers decided to proceed onto the second phase of Design Thinking: defining and aligning questions for the online survey.

2.2. Survey main themes: aligning questions

The starting question (‘How are RDNs using digital media to communicate with their public?’) was not answered by the literature review. There were queries and gaps that needed to be filled. The creation of relevant questions well-suited to current professional scenarios was driven by a process in which two complementary methods were used: insight cards and brainstorming. Each possible question and its respective answers were written on a small

piece of paper – known as an insight card – in a brainstorming session. The insight card facilitates quick consultation and handling of pieces of materialized ideas [20], while brainstorming encourages the generation of a larger quantity of ideas in a shorter interval of time – this can be done in a group or individually; in this case, the individual session was used. The main brainstorming rule is to give the participant freedom, as it is necessary that they do not feel judged. The brainstorm method leads to prioritization of quantity instead quality of ideas [20].

A relevant question to integrate on this survey regards to the identification of the used social media channel(s). The Knight et al. (2017) study indicated a huge range of platforms, such as: Facebook, Twitter, LinkedIn, Blogs, YouTube, Instagram, Tumblr, Pinterest, Vine, DailyMotion, SecondLife, Yelp, Qype, Wikipedia, Foursquare, Snapchat and Instant messaging (e.g. WhatsApp, Blackberry messenger, Yahoo messenger). The other study [16] proposed the following ones: LinkedIn, Facebook, Blogs, YouTube, Twitter, Instagram and Pinterest. Hence, each channel was written on a small piece of paper and passed onto the next phase.

This phase resulted in a set of questions and answers written on small pieces of paper, which were then passed onto the development phase. In the next phase, a panel of different expert reviewed the contents.

2.3. Experts Review

This phase was conducted using an item pool reviewed by experts [21], who provide advice regarding the question-and-answer approach. The goal was to maximize content validity through confirmation or invalidation of the items on this social media use context by RDNs.

The Design Thinking field considers this method a form of heuristic analysis with experts [22]. It is one of the most common method of evaluation based on the previous experience of evaluator. This phase was divided into five steps with nine experts: five are specialists of Information and Communication Technologies, one is a methodology specialist and three are nutrition specialists (tab. 1). Together, they cover vast and in-depth knowledge from interdisciplinary fields that connect communications and technology with health (and, more specifically, nutrition) and methodology field.

- (1) Expert opinions in information and communication technologies (ICT) – Phase carried out over three individual session in a Digital Media and Interaction research center with invited experts. At the beginning of each session, they were briefed on the goals and how it works, as well as the following study items: purpose, object and context. Therefore, each expert received a set of all the written questions and answers that were made in the previous phase (Design Thinking - Discover). They were asked to select, order and rate the questions and answers according to relevance. Each participant could move their piece of paper on or outside of the whiteboard – Figure 2 and 3. This indicated their opinion on a question that should be included in or omitted from the survey. In addition, the experts had to group the pieces of paper by affinity based on their analysis related to the current study. Some questions were discarded, some were saved for use in further research tools, and others were included and ordered in this study and associated with a common content area. These content areas were: demographic profile, social media usage habits, behaviors on social media, communication by messages to clients and social media followers, closed groups to follow up with clients, remote appointment, profile recommendations and opinions on the role of social media role in RDNs' practices. The task of grouping the written items into content areas was based on the affinities diagram method. This aims to identify areas of similarities and opportunities between the items in a set [20]. In individual sessions, experts were also asked to indicate the most suitable question-and-answer approaches. In addition, the experts had to identify the best logical sequence of the questions. Another important point discussed was what digital media channel(s) should be considered in this survey. The channels written down in the previous phase were used in this step. After a debate, it was concluded that it was important to summarize a social media list. Thus, the experts were asked to decide the platforms that should be included; they chose Instagram, Facebook, instant messengers (such as WhatsApp). They also included other digital tools such as SMS, closed groups and remote consulting. All these elements were included in the survey;
- (2) Expert opinions in ICT that should review the previous instrument – After the three previous individual sessions, the results of this phase were compiled in an online format and submitted to the other two ICT experts, who confirmed or suggested changes so as to cover the current and relevant ICT thematic areas;

- (3) Expert opinions in methodology – After identifying the content area, creation and confirmation of the online form, the survey was presented to a methodology expert. This expert considered the conciseness and clarity of the online survey and identified the most suitable types of question-and-answer approaches;
- (4) Expert opinions in nutrition – While the relevant ICT topics and their methodology approach have been determined, it was also necessary to understand if the online form was suitable and clear for the target public. Therefore, the online form was submitted for evaluation by a nutrition specialist who is a university course coordinator and teacher. This expert suggested some changes;
- (5) Expert opinions from the Portuguese Council of Nutritionists – Finally, the online form was submitted to the research partner. The task was assigned to the Communications Department; in this case, two RDNs reviewed the survey and recommended changes such as replacing some words and adding some questions.

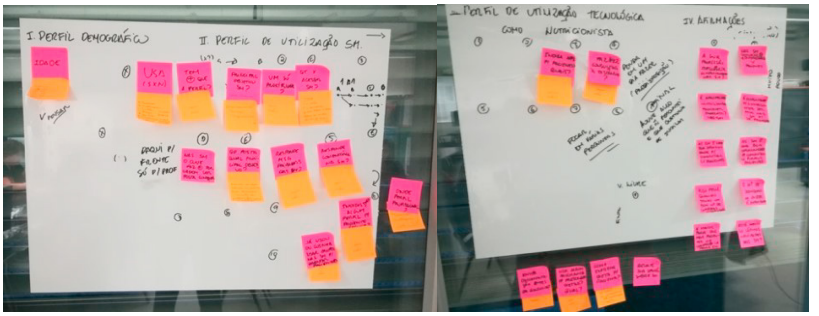

Figure 2 and 3: The Design Thinking Process (affinities diagram method) for creating the survey

2.4. Pilot test

This phase involved a pilot study through an online survey form that was the result of all the previous phases to understand if the survey was suitable, clear and concise for the target public. These tests were done on a small scale: 31 pilot tests in two countries. It was first submitted to Portuguese students and RDNs (n=21), then some terms were adapted and the form was sent to Brazilians RDNs (n=10). Analysis of all these tests enabled improvements to the question-and-answer approach and the obtainment of another perspective on this study. At the end, it was possible to realize the challenge of understanding the activities, interests and opinions of RDNs on social and digital media. The results of these tests are presented in next section, and the online survey can be accessed via this link.†

3. Results

This section presents the results, divided in 5 bullet points, of the pilot test completed by the RDN participants. Unexpected gaps and faults to be corrected in the next phases were identified.

- Demographic profile: Topics considered – profession, gender and year of birth. Respondents were RDNs (n=8), trainees (n=2) and SDs (n=19). Student participants/interns were only asked to complete the online survey if they had graduated and were already working (internship). This situation was acceptable to the researchers, because it was a test run. The majority of respondents are female (n=25 of 31), and the average birth year is 1992 (i.e. 27 years old). Results show the importance of adding new questions for the next research phase: the year in which the RDNs graduated from their course that allowed them to register in the Portuguese Council of Nutritionists and specialist professional areas such as, collective eating and restaurants, clinical nutrition and communitarian nutrition and public health;
- Social media usage habits – Related questions addressed: digital tools used, types of profiles, personal or professional, and professional usage frequency of social media. Instagram predominates in comparison with the

† https://docs.google.com/forms/d/1NqN2EYmNNIXbgnF8oee-j2W3bZ0TdBNDwAFaz-1o8-w/edit

other digital media channels (Instagram= 29, Facebook= 24 and WhatsApp= 23) and was indicated on table 3, it is the most used digital tool and the most accessed one on a daily basis. It is necessary to investigate if this trend continues to prevail on a larger sample. WhatsApp should be framed in a larger topic (messaging systems) enabling the collection of data regarding other systems, as Telegram;

Table 2: Distribution of profile types – Instagram (IG), Facebook (FB) and WhatsApp (W)

Causes of social media usage	IG	FB	W
No profile	2	2	5
One Personal profile	23	21	22
Two or more personal profiles	1	0	1
One professional profile	1	1	2
Two or more professional profiles	0	1	1
Both personal and professional profiles	3	3	4

Table 3: Professional usage frequencies of social media – IG, FB, W and SMS

Causes of social media usage	IG	FB	W	SMS
Never	5	9	13	18
One a month	3	4	1	1
Once a week	4	1	0	0
Two or three times a week	1	5	1	1
Once a day	4	3	5	2
More than once a day	11	5	5	3

- Behaviors on social media – The hot topics are (tab. 4): reading, commenting, sharing and writing. The social media channels examined were Instagram and Facebook. The most common behavior among RDNs users is to 'read posts from [their] colleagues'. This is the most common option among the ones related to colleagues. Therefore, according to the results the main purpose for social media use is network building. A set of changes is needed for future works: (i) The term 'patient' should be changed to 'customer' for all the questions in the survey, because this includes a larger population; (ii) The term 'colleague' should be more specific; it should be divided into two categories: the RDNs' colleagues and colleagues from the health sector; (ii) The 'third parties' option should be included for each online behavior.

Table 4: Online behaviors –IG and FB

Online behaviors	IG	FB
Read posts from my patients	5	0
Read posts from my colleagues	25	17
Comment on posts from my patients	5	0
Comment on posts from my colleagues	12	10
Share posts from third parties with my patients	6	2
Share posts from third parties with my colleagues	14	11
Write posts for my patients	4	1
Write posts for my colleagues	10	7

- Messages from customers and social media followers This study was interested in communications between RDNs and social media users. It aimed to understand if RDNs receive private message from these two types of users (patient and followers) and how these messages were answered – i.e., by the RDNs themselves or their collaborators – Table 5.

Table 5: Messages from the RDNs' customers and followers – IG, FB, W and SMS

Answers	RDNs' customers				Followers			
	IG	FB	W	SMS	IG	FB	W	SMS
Receive private messages	7	3	7	3	19	12	6	3
I answer all of them	9	5	8	7	15	9	8	6
I have a collaborator who answers them	2	1	1	0	2	1	0	0

- Closed groups for patient follow-up: This feature was one of the points that emerged from the ICT specialists' analysis. This step aimed to determine how this feature has been used by RDNs: if they manage closed groups, want to or are thinking about doing so. Results below (tab. 6) shows that 16.12% of the participants are thinking about creating a closed group to follow up on their patients. The experts noted that was important subdivide the option 'I have a closed group to guide my patients' into two items: 'I am currently guiding one or more closed groups' and 'I am in one or more closed groups, in which I help to guide the participants'. In addition, the option 'I am not interested in creating, participating or managing closed groups' should be added.

Table 6: Closed groups

Answers	IG	FB	W
I´ve made a closed group for my patients	1	1	2
I have a closed group to guide my patients	1	1	1
I am thinking of creating closed group	5	4	5

- Remote consultation: This part of the online survey aimed to understand the possibility of remote consultations provided by the RDNs. The answers are as follows: (i) I´ve done remote consultation: Instagram (n=1), Facebook (n=1), WhatsApp (n=4), Skype (n=2), Hangout (n=0), Other videoconference system (n=0); (ii) I do remote consultation: Instagram (n=0), Facebook (n=1), WhatsApp (n=1), Skype (n=1), Hangout (n=0), Other videoconference system (n=0); (iii) I am thinking about remote consultation in the future: Instagram (n=5), Facebook (n=5), WhatsApp (n=3), Skype (n=6), Hangout (n=3), Other videoconference system (n=3); (iv) I am not interested in remote consultation: Instagram (n=4), Facebook (n=3), WhatsApp (n=3), Skype (n=1), Hangout (n=1), Other videoconference system (n=2).These results revealed that there are RDNs who are thinking about remote consultation. Hence, this question seems to be interesting for future studies.

3.1. Recommendations

We had two different type of questions about recommendations, social media profiles on Instagram and Facebook and Apps. Firstly, social media users can recommend several types of profiles. Therefore, the researchers asked about these types and whether the recommendations are through consultation or online. About this topic, one future change to the answers for this question is to make the term 'colleague' more specific. This means the addition of two categories: the colleagues who are RDNs and colleagues in the health sector. Moreover, it is important to replace the multiple-choice format with checkboxes that allow one or more answers to be marked; this makes it possible to decrease the response options regarding recommendations via consultation and online. Secondly, it was asked in another question about recommendations of apps that may contribute towards patient nutritional assistance. Their answers should be presented with checkboxes that allow one or more answers to be marked. The results from both types are also presented on table 7. The following question asked for information about what are apps that the participants are used to recommend, they indicated: carb and cals, PNPAS site, Dietbox, WebDiet, LG Health and Beba água (English: drink water)

Table 7: Recommendations - I do not recommend them (Not recommend), I recommend them during consultation (consultation), I recommend them online (online), I recommend them both during consultation and online (consultation and online)

I recommend	Not recommend	Consultation	Online	Consultation and online
My Instagram profiles	14	2	1	2
My Facebook profiles	12	1	3	1
Instagram profiles from my colleagues	6	3	7	1
Facebook profiles from my colleagues	9	3	2	1
Instagram profiles from products or services	10	1	2	2
Facebook profiles from products or services	10	1	2	1
Apps for calorie control, diary or water consumption	10	9	0	0

3.2. Opinions on the role of social media in an RDN's practice

- Why is social media usage important to RDNs? The statement 'It is important for RDNs to be active on social media' should be complemented for concordance with each item below (tab. 8):

Table 8: Causes of social media usage - Likert scale: concordance level from I totally disagree (L1) to I totally agree (L5)

Causes of social media usage	L1	L2	L3	L4	L5
To disseminate the results of their work	4	2	4	13	5
To gain customers	1	4	10	7	6
To follow up with their customers' treatments	2	4	5	11	5
To network with their colleagues	0	0	3	14	11
To spread knowledge on healthy eating	1	0	0	11	16
To share their scientific knowledge on nutrition	0	1	0	11	16
To communicate with people who are interested in nutrition	0	0	2	12	14

- 'The RDNs' behavior on social media should be guided by…'. This statement should be complemented for concordance with each one of these items: A set of principles and posture in agree with their profession; attitude and language that become communication easy and that involve the major number of social media users (tab. 9).

Table 9: Causes of social media usage - Likert scale: concordance level from I totally disagree (L1) to I totally agree (L5)

The RDNs' behavior on social media should be guided by	L1	L2	L3	L4	L5
A set of principles and posture in agree with their profession	0	0	2	5	21
Attitude and language that become communication easy and that involve the major number of social media users	0	1	5	6	16

- Which indicators can be used to observe the RDNs' visibility?

Table 10: Causes of social media usage - Likert scale: concordance level from I totally disagree (L1) to I totally agree (L5)

The RDNs' behavior on social media should be guided by	L1	L2	L3	L4	L5
Number of like on their posts	3	8	5	13	0
Number of visualizations on their posts	2	5	7	13	2
Feedback of user' evaluations (such as: stars on Facebook)	2	4	9	14	0

4. Conclusion and future works

Nutritional culture is rising and, that their promoters, the RDNs, have a special role in promoting eating behaviors based on their scientific knowledge [4]. RDNs' speech is transmitted by several media, mainly the digital media, like Instagram [2], [16]. The interest on this theme – the connection of RDNs with social media- is growing [3]. However, there is a small number of studies that is focused to understand this situation through quantitative analysis (study from this research team sent for publication). With this in mind, the research team carried out a literature review work and concluded that a it was crucial to create an online survey.

This paper presented the process of building this online survey, using a Design Thinking approach. An online survey was created aimed to be concise, clear and suitable to be answered for a large number of people. It was developed to be short and answered quickly. The main thematic questions integrated in the survey were: Which RDNs profiles are using social media in their practice? Which digital tools are been used in their practice? What is their professional usage frequency of social media? What are the purposes of their use? Which are their most common online behaviors? How are the private messages answered? Health professionals are using closed groups for patient follow-up? Health professionals are consulting patient remotely? Health professional are recommending other social media profiles? What attitudes do RDNs have on digital media? Despite the interesting results obtained during this process, this survey is a result of a continue effort of the research team. This research process was initiated by an ethnographic study of opinion leaders on social media, after the observation of online health challenges and a literature review on RDNs and social media.

The future work will be the final survey application aiming to understand how health professionals are using social media on their professional context. This survey should be considered an instrument that can be adjusted to understand other contexts regarding to other countries or other professionals. More research is needed in this field to better understand its potential in other domains.

Understanding social media impact for health context for the general population is a major concern. The way health professional carry out their role on social media is the initial step to understand this phenomenon and, in particular, the end-users. It is insightful to understand how people react to the online behavior of these professionals. Users are becoming more and more active online searching information on internet and trying to participate on their own treatment as ePatients [23], [24]. It is necessary observe how health professional are communicating about health theme for an audience with millions of users on social media and consequently understand what is their impact on the users daily routines.

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