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Barriers and facilitators to the implementation of a qualitative menu labeling in a self-service buffet restaurant: operators and employees perspectives

Barreiras e facilitadores para implementação de um modelo de informação qualitativa em restaurante tipo bufê de autosserviço: perspectivas de gestores e funcionários

Abstract

Introduction: Eating out is associated with consuming lower-nutritional-quality foods. Restaurants can provide menu labeling for culinary preparations to assist consumers in their food choices. Qualitative information, such as ingredient lists and symbols indicating healthy options, appears to be more effective compared to quantitative models. However, the implementation relies on the collaboration and involvement of employees. **Objective:** To examine operators' and employees' perspectives about barriers and facilitators to the implementation of qualitative menu labeling in a self-service buffet restaurant. **Methods:** Qualitative methods were applied in a single case-study scenario at a self-service buffet restaurant in a Brazilian capital city. Participants comprised 11 employees and 2 operators ($n = 13$), representing 93% of the restaurant staff. During the intervention phase, a five-day period involved labeling six daily culinary preparations, including the culinary name of the dish and ingredients list, and highlighting organic ingredients in the menu descriptions. Then, individual interviews were conducted and thematic analysis organized responses into different themes and subthemes. **Results:** Minimal barriers were reported, with only one concern raised by the owner regarding consumers' perception of low nutritional quality ingredients. Conversely, numerous facilitators were identified, such as ingredient standardization, optimization of working time, and fulfillment of consumers' right to information. **Conclusion:** Both employees and operators considered this qualitative menu labeling model easy to implement. The approach was deemed advantageous for operators and enhanced the overall consumer experience. Recommendations included conducting similar qualitative studies in distinct locations and quantitative studies with larger samples to validate these findings on a broader scale.

Keywords: Food service. Qualitative Research. Interpretative information. Food labeling.

Resumo

Introdução: A alimentação fora de casa está associada ao consumo de alimentos de menor qualidade nutricional. Para auxiliar nas escolhas alimentares dos comensais, os restaurantes podem disponibilizar informações sobre as preparações culinárias. Informações qualitativas, como listas de ingredientes e símbolos indicando opções saudáveis, parecem ser mais eficazes em comparação aos modelos quantitativos. No entanto, a implementação depende da colaboração e do envolvimento dos funcionários.

Objetivo: Examinar as perspectivas dos gestores e funcionários sobre barreiras e facilitadores para a implementação de um modelo de informação qualitativa em um restaurante tipo bufê de autosserviço. **Métodos:** Aplicação de metodologia qualitativa, por meio de um estudo de caso único, em um restaurante tipo bufê de autosserviço em uma capital brasileira. A amostra compreendeu 11 funcionários e 2 gestores ($n = 13$), representando 93% da equipe do restaurante. A fase de intervenção consistiu em um período de cinco dias, que envolveu a disponibilização de informação qualitativa para seis preparações culinárias diárias, composta por nome da preparação culinária, lista de ingredientes e destaque para presença de ingredientes orgânicos. Em seguida, foram conduzidas entrevistas individuais e posterior análise temática, de modo a organizar as respostas em diferentes temas e subtemas.

Resultados: Houve menção de apenas uma barreira, referente à preocupação de um gestor sobre a opinião do consumidor ao identificar ingredientes de baixa qualidade nutricional na lista de ingredientes das preparações culinárias. Em contrapartida, vários facilitadores foram identificados, como padronização de ingredientes, otimização do tempo de trabalho e cumprimento do direito dos comensais à informação. **Conclusão:** Funcionários e gestores consideraram esse modelo de informação qualitativa fácil de implementar. A abordagem foi considerada vantajosa para os gestores e para melhorar a experiência geral do comensal. Recomenda-se a realização de estudos qualitativos semelhantes em locais distintos e estudos quantitativos com amostras maiores para validar esses resultados em uma escala mais ampla.

Palavras-chave: Serviço de alimentação. Pesquisa qualitativa. Informação interpretativa. Intervenção em restaurante. Informação nutricional.

INTRODUCTION

Eating meals prepared away from home seems to be associated with a higher consumption of foods and culinary preparations of low nutritional quality.¹⁻⁶ More specifically, away-from-home meals are linked to increased consumption of ultra-processed foods and decreased consumption of fresh and minimally processed foods, such as cereals, legumes, roots, tubers, fish, shellfish, eggs,¹ fruits, vegetables, leafy greens, and dairy products.²⁻⁴ The food-away-from-home sector is a conducive environment for implementing initiatives to promote healthy eating, as outlined in literature reviews.⁷⁻⁸

Displaying the menu labeling of culinary preparations served to diners is a strategy restaurants adopt to encourage healthy food choices, promoting health⁸ and preventing obesity and other chronic noncommunicable diseases.⁹⁻¹⁰

A review study published in 2020 identified three voluntary and eight mandatory regulations related to information provision in restaurants worldwide.¹⁰ These regulations were found in 11 middle- and high-income countries - the list did not include Brazil.¹⁰ Most regulations concern the display of calorie information for restaurant preparations.¹⁰ However, systematic reviews demonstrated that calorie labeling does not satisfactorily improve consumers' food choices in real restaurant environments.¹¹⁻¹⁷

In addition to having low effectiveness in promoting healthy food choices, quantitative information labeling, such as calorie and nutrient content, excludes important aspects of foods and culinary preparations.¹⁸ Furthermore, calorie information alone does not completely meet consumers' right to information, which is a fundamental human right. Qualitative information, such as the ingredients list and symbols, is more relevant to consumers, whose choices are often conditioned by their needs and eating habits.^{14,19-21}

Kerins et al.²² noted that, in addition to collective law and efforts dedicated to promoting healthy food choices, there is a growing mobilization of policies for providing information in restaurants, along with identifying barriers and facilitators. Some barriers that might need to be overcome include a lack of standardization of recipes or menus, limited space on menus, frequent changes/variations in menus and many menu items,²² the need for time and skills to provide adequate information,²³⁻²⁷ the rigidity of supplier contracts and licenses, and the increase in implementation costs.²³⁻²⁴ Despite these barriers, some restaurant operators stated that it is easy to maintain after menu labeling has been implemented.²⁶⁻²⁷

As for facilitators, the list includes improved business image, customer retention/attraction, increased sales and customer confidence, cost savings, opportunity for service improvement, relationship building with health authorities²² and the possibility of using nutrition information as a marketing strategy.²²⁻²³ Studies also cite health education and improved food environment, potentially leading to healthier food choices^{24,28,29} and increased awareness among operators and employees of the importance of providing nutrition information.³⁰ In fact, operators and employees are key actors in implementing menu labeling strategies in restaurants, as they can either generate barriers or facilitators, depending on their understanding of the importance of such practices.

It is noteworthy that none of the identified studies that examined the perspectives of restaurant operators and employees regarding the implementation of menu labeling were conducted in Brazil or any other South American country. Additionally, these studies were conducted in various food service establishments, but none focused on commercial self-service buffets. Another interesting point is that most interventions displayed quantitative menu labeling, mainly calorie counts.²³⁻³⁰ Only three studies used qualitative information, such as symbols indicating healthier culinary preparations.^{24,29,31}

Therefore, there is a gap in the existing research, as there is a lack of studies examining the perceptions of operators and employees regarding the introduction of qualitative menu labeling, including ingredient lists, to self-service buffet restaurants in Brazil. The theme's relevance lies in the fact that these actors are ultimately responsible for the availability of food and menu labeling in restaurants. In view of the foregoing, this study aimed to identify barriers and facilitators to implementing a qualitative menu labeling model in a Brazilian self-service buffet restaurant from the perspective of operators and employees.

METHODS

This is a qualitative investigation with a case-study approach conducted in 2022.

Study location and population

The study was conducted in a self-service buffet restaurant belonging to a local chain, located in the central region of a Brazilian capital city. Despite being attached to a hotel, it is open to the general public, catering mainly to local workers besides hotel guests. The selected restaurant was chosen due to its suitability for the insertion of menu labeling in the buffet area and its physical space, which accommodated the non-randomized controlled trial conducted before this study by Fogolari et al.³² Additionally, the centralized production of meals in the hotel unit facilitated logistical aspects, making it a practical choice. Furthermore, the selected restaurant shares identical menu items and system features (self-service buffet) with the nearby unit on the same street, where there was no menu labeling.

Lunch is served every day of the week from 11:30 a.m. to 3 p.m. in a self-service buffet. An average of 150 meals are consumed daily. Culinary preparations offered in the buffet include 11 options of salads (raw, cooked, and/or mixed), without the addition of spices or sauces; two options of cold dishes (preparations based on starchy vegetables without vegetables as the main ingredients, such as cereals, pasta, bread, animal protein, and pulses); 12 options of hot dishes (pasta, vegetables, fried foods, rice, beans); four options of animal protein dishes; and two options of sweet desserts. Industrialized salad dressings, olive oil, and vinegar were also available.

Sampling was non-probabilistic – convenience sampling. All restaurant staff were invited ($n=14$), and 93% ($n = 13$) agreed to participate in the study. The final sample consisted of operators (owner and manager) and employees whose functions were related to the implementation of menu labeling or the provision and replacement of culinary preparations in the buffet (cooks, kitchen assistants, and waiters).

Menu labeling implementation and data collection

Menu labeling was prepared by a nutritionist-researcher in the week prior to their disclosure in the buffet. The researcher had prior access to the menu and collected production data on culinary preparations. The data collection method was direct observation and consultation with employees, as the restaurant did not have technical data sheets for culinary preparations. The employees shared information regarding ingredients and culinary preparation techniques, while the owner identified which foods were organically sourced. The aforementioned nutritionist-researcher consulted the ingredients list of processed and ultra-processed foods. The data was recorded on a spreadsheet. Menu labels were prepared based on the model proposed by Oliveira et al.³³ Each label consisted of a self-explanatory name of the dish, along with an ingredient list, with organic ingredients highlighted.

Menu labels were printed in Arial font, with the dish's name written in size 12, boldface, uppercase font, and the ingredients list in size 11 font. Labels were printed on white paper (4 cm × 8 cm), placed inside plastic tags (Figure 1), and arranged in the buffet close to the respective culinary preparations (Figure 2). It should be noted that, for feasibility purposes, menu labeling was applied to six culinary preparations each day: a salad and a cold dish, two hot dishes, and two animal protein dishes. We selected these culinary preparations to designate one as a representation of a healthier choice and one as a representation of a less healthy choice within their respective categories. Since no salad options could be classified as less healthy, salads and cold side dishes were grouped together, with salads representing the healthier food choice and cold side dishes representing the less healthy option. Further details about the study methodology can be found in Fogolari et al.³²

Figure 1: Qualitative menu labeling models.



Figure 2. Qualitative menu labeling of culinary preparations in a self-service buffet restaurant.



After five days of implementing qualitative menu labeling, the restaurant owner authorized interviews with operators and employees during work hours.

Ethics clearance was obtained from the Human Research Ethics Committee of the university where the study was conducted (protocol No. 5.425.329). All participants signed an informed consent form before participation. The researchers interviewed all employees and managers who agreed to participate, regardless of data saturation being reached. The interviews were conducted individually and recorded using a digital voice recorder.

A semi-structured interview guide was used for data collection. It contained the following open-ended questions:

- (1) What are the pros and cons, or facilitators and difficulties, of the implementation of menu labeling in this restaurant?
- (2) What are your recommendations for the implementation of menu labeling in restaurants?

Data treatment and analysis

Responses were transcribed by one researcher and verified by another. The responses of operators and employees were analyzed together but are examined separately in the Discussion. Interview data were subjected to thematic analysis. This technique is used in qualitative research to identify, describe, and analyze response patterns (themes).³⁴

Thematic analysis consisted of four main steps. First, two researchers performed an immersive reading of transcripts to gain an overview of their content and search for possible nuclei of meaning. Subsequently, the two researchers separately performed a systematic re-reading and categorized the data into themes and sub-themes according to their individual interpretation. Then, individually identified themes and sub-themes were compared. After analysis and discussion between the two researchers and the guiding team, some themes and sub-themes were reorganized and renamed.

RESULTS

Sample characterization

Two operators and 11 employees were interviewed (Table 1), totaling 13 participants, which represents 93% of the restaurant staff met the inclusion criteria and were invited to participate in the survey. Most participants were female ($n=7$, 64%), belonged to the 40-49 years age group ($n=5$, 38%), and had completed secondary education ($n=7$, 64%). As for work positions, most participants were kitchen assistants ($n=4$, 31%) and waiters ($n=4$, 31%).

Table 1. Sociodemographic characteristics of interviewed operators and employees of a self-service buffet restaurant ($n = 13$). Florianópolis, Santa Catarina, 2022.

| Variable | <i>n</i> | % |
|------------------------------|----------|-----|
| Sex | | |
| Male | 6 | 46% |
| Female | 7 | 64% |
| Age group (years) | | |
| 18-29 | 1 | 8% |
| 30-39 | 4 | 31% |
| 40-49 | 5 | 38% |
| 50-59 | 3 | 23% |
| Level of education | | |
| Complete primary education | 2 | 15% |
| Complete secondary education | 7 | 64% |
| Complete higher education | 4 | 31% |
| Job position | | |
| Kitchen assistant | 4 | 31% |
| Waiter | 4 | 31% |
| Cook | 3 | 23% |
| Manager | 1 | 8% |
| Owner | 1 | 8% |

Source: the authors.

Interviews

The interviews lasted an average of two minutes and ranged from 1 to 6 minutes. Thematic analysis identified six main themes and 15 subthemes. Chart 1 presents some interview excerpts related to each theme and sub-theme.

Chart 1. Themes and sub-themes regarding facilitators and barriers to the implementation of qualitative menu labeling in a self-service buffet restaurant according to operators' (O) and employees' (E) perceptions

| Theme | Subtheme | Interviewees' perceptions |
|--------------------------------------------------------|------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ease of implementation | Ease | <p>"For me, it was very easy." (E)</p> <p>"I think all are easy, in fact." (O)</p> <p>"Everything was clear, well explained." (E)</p> <p>"It's all positive, all positive." (E)</p> <p>"For me, it was all cool, all good." (E)</p> <p>"It helps and makes it easier for us, right?" (E)</p> <p>It turned out to be simple, easy." (E)</p> |
| | Lack of difficulty | <p>"I don't think there are any difficulties." (O)</p> <p>"I saw no difficulty." (E)</p> <p>"I don't think there's any difficulty." (O)</p> <p>"No [difficulty], on the contrary." (E)</p> <p>"I see quality and I don't see anything against it; until now, it hasn't influenced anything." (E)</p> <p>"No [difficulty], I think not." (E)</p> <p>"No [difficulty], I think that, as we are already used to the other things we do, I think it doesn't make much of a difference, you know?" (E)</p> <p>"No [difficulty]." (E)</p> |
| Satisfaction with the implementation process | Appreciation of employees' work | "It was very satisfying, even though we were in the rush hour and couldn't pay much attention." (E) |
| | Continuity of the process | "It could go on like this." (E) |
| Advantages related to consumers' access to information | Consumers have a right to information about what they are eating | <p>"It would be nice to put little signs on salad dishes indicating the ingredients, you know? And specifying what is organic, what is not. It would be nice if all restaurants had such signs on the buffet." (E)</p> <p>"Because the information they put on labels was very true... It is very important that all dishes have labels indicating the ingredients... And so, customers would know what's in each dish and how each dish is prepared." (E)</p> <p>"So, sometimes it's something that the customer comes across in the restaurant, and sometimes they don't consume the dish because they don't know the nutrition information of what they're going to eat." (E)</p> <p>"I think information is always welcome, right?" (E)</p> |
| | Consumers are concerned about eating more natural foods | "Nowadays, customers are very demanding, they don't like industrial products, they want more natural products, you know? Some don't care, but I observe that there are more people concerned about the food they are going to eat, about their health, than those who do not worry, you know?" (E) |

Chart 1. Themes and sub-themes regarding facilitators and barriers to the implementation of qualitative menu labeling in a self-service buffet restaurant according to operators' (O) and employees' (E) perceptions (Continues)

| Theme | Subtheme | Interviewees' perceptions |
|--------------------------------------------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Advantages related to consumers' access to information | Ingredient information is important for allergy sufferers | "I find it very interesting for those who have food allergies." (O) |
| Suggestions on the format of menu labeling | Menu labeling should be more visible | "Oh, I think it should be labels that, how can I tell you, that have considerable visibility, you know?" (E) "I think that if we better disclosed what goes in dishes, what the product contains. I think customers... maybe, many customers don't even see it, you know? They normally check if it is a shrimp pastry or a meat pastry, but they don't exactly read what it's made of." (O) |
| | All preparations should have menu labeling | "Labels should be on all dishes, not just for one in particular, two, three, five... but for all dishes." (E) "It would be nice to put labels on salads." (E) |
| | Menu labeling should include nutrients | "All foods should have nutrition information, right? What food are you eating, what nutrients are in it, what vitamins are in it." (E) |
| | Menu labeling should also be presented in other languages | "More detailed, exactly. Since we already have [the name of the preparation] in English too, right? At breakfast, there are some dishes that are in English, as we receive a lot of foreigners." (E) |
| Advantages related to facilitating work | Saves staff time in providing information about preparations to customers | "Customers sometimes ask us [what the ingredients are]. Training was good because we also learned to read what goes and what doesn't in each preparation, so we can pass the information to clients, you know?" (E) "In one way or another, it made the work better for me; I don't waste time explaining what it is [preparation ingredients]. The signs are there to show what the ingredients are. For me, it helps a lot in identifying." (E) |
| | Stimulates standardization of meal production through technical datasheets | "A technical datasheet. The ingredients and inputs of a recipe would be standardized, right? On your day off, the other cook can look at the technical datasheet if they have any questions ... if I cook it one way and another person comes, creating another recipe, adding ingredients that I don't use, for example... it is very important to create a technical datasheet ... calculate, write down everything that is done, weigh and put a sample for those who are researching, informing themselves, to do something more standardized, right?" (E) |
| | Presence of a dietitian to implement menu labeling | "I think that the presence of a dietitian in the kitchen is very good, it is something that really works, it does not stay in theory. Dietitians together with us in the kitchen, in practice, it is a change because sometimes we do something wrong without being aware, you know? I think it's very important to have a dietitian in the kitchen." (E) |
| Barrier to implementation of qualitative menu labeling | Concerns about public opinion on ingredient quality | "We've had some difficulties at times with how this was going to reach the public... depending on the price, you have to work with a lower-quality [product]; we don't know how the customer will receive this information, you know?" (O) |

The responses from the participants highlighted their perception of the ease of implementing the proposed menu labeling model. As a result, the most prominent emerging theme was labeled "Ease of Implementation," comprising reports of ease and absence of difficulties - only one challenge was cited. Additionally, participants spontaneously reported satisfaction with the implementation process and offered suggestions on the format of menu labeling. Furthermore, they mentioned advantages of the implementation of the proposed menu labeling model, related to consumers' access to information and facilitating work.

DISCUSSION

Below, we discuss the facilitators and barriers to implementation of qualitative menu labeling in a self-service buffet restaurant, identified in interviews with restaurant operators and employees.

Participants were unanimous in stating a lack of difficulty in the implementation of the qualitative menu labeling, as evidenced by the excerpts presented in Chart 1. Employees reported not observing any difficulty or major changes in their work routine with the implementation of qualitative menu labeling. Many also mentioned that the process of the implementation of the qualitative menu labeling was easy, as evidenced in the first sub-theme.

In similar studies in other countries and in other types of restaurants, respondents perceived more difficulties in implementing menu labeling than those observed here. The main difficulties reported referred to the complexity of preparing quantitative information (calorie and nutrient contents),^{24,25} and the time and costs related to hiring a registered dietitian, training staff, or adapting ingredients and/or culinary preparations to provide a more healthful menu.^{23,24} Of note, the qualitative model adopted in the current study precludes the need to define the calorie and nutrient contents of preparations.

Another theme that emerged from interviews was satisfaction with the process of the implementation of the qualitative menu labeling. One participant used the word "gratifying". Such a positive perception by employees is important, because job satisfaction is associated with employee engagement, commitment, motivation, and appeal in a good work environment.³⁵

One of the interviewees stated that qualitative menu labeling should continue, even after completion of the study. Although such continuity was not part of our objectives, satisfaction with the implementation process and the perception of work appreciation, particularly among the kitchen crew, aroused interest for the maintenance of this approach in the restaurant.

Contrary to our findings, in previous studies, participating restaurants did not continue menu labeling^{23,31} and, in some cases, dropout occurred even before study completion. These situations were observed because employees considered the entire process of adapting the menu and/or preparing menu labeling difficult to implement and maintain, given the lack of recipe standardization, even with the assistance of a dietitian.²⁵

The biggest advantage is associated with consumers' right to food information. In Brazil, nutrition labeling is mandatory in packaged foods since 2003;^{36,37} however, requirements do not apply to restaurants. Availability of menu labeling in restaurants can help consumers make food choices that contribute to healthy diets and allow them to better understand the role of diet in promoting health.³⁸ Such contribution may further benefit consumers who are more concerned about health, natural foods, and preparations that contain fewer ultra-processed ingredients, as mentioned in another advantage.

One interviewee reported that access to menu labeling, such as the ingredients list, is important for people who suffer from food allergies. For these individuals, even minimal amounts of certain foods can trigger severe allergic reactions.^{39,40} Therefore, availability of menu label is essential to prevent possible adverse reactions associated with food in individuals with food allergies and intolerances.⁴⁰

Menu labeling, by itself, can serve as a marketing strategy for the establishment,²³ with possible improvements in the image and reputation of the company, opportunity to meet customer demands, and instigation of consumer interest in nutrition information.²²

The second question of the interview guide allowed restaurant operators and employees to provide suggestions about the format of qualitative menu labeling. The participants stated that information should be made more visible to the public. Vasiljevic et al. observed the same need in a pilot study conducted in company restaurants.²⁶

The lack of regulation on the availability of menu labeling for culinary preparations in restaurants leaves a gap in how to present such information. In these cases, it is essential to consider information visibility and legibility, paying attention to the size and font of words, contrast with the background, objective writing, and presence of symbols, in addition to environmental factors such as local lighting.²⁷ Good readability can guarantee access to information, a consumer's right, and promote more informed choices with regard to food and nutrition.⁴¹ Nevertheless, it is known that factors intrinsic to consumers, such as level of education and the ability to interpret information, among others, can influence food choices.⁴²

One interviewee suggested listing the nutrients present in a culinary preparation, a topic that has been addressed in other studies.^{23,25,28,29} However, quantitative information may not be reliable because portion sizes may vary according to client preferences, particularly in a self-service restaurant. Therefore, providing quantitative information in restaurants may result in over or underestimation of nutrient contents.⁴³

Another suggestion was to provide the menu labeling in foreign languages, given that the restaurant was attached to a hotel and located in a municipality with a high tourism rate. However, as observed by Kerins et al., there are space limitations for displaying the labels.²² Nevarez et al.²⁸ and Brown et al.²⁵ presented nutrition information and calorie contents in a leaflet. Such a strategy could be adopted to make information available in other languages.

Implementation of qualitative menu labeling allowed employees to save time. This finding goes against those reported in studies on implementing quantitative menu labeling; the time required for implementation was considered a challenge or barrier.²³⁻²⁷ Waiters, in particular, noticed a decrease in the recurrence of questions about preparation ingredients by customers, as such information was provided on menu labels.

Another facilitator was the possibility of encouraging the creation and use of technical datasheets for culinary preparations, which are necessary to maintain menu labeling. The restaurant studied did not have technical datasheets or standardized operating procedures for meal production. One interviewee reported the existence of different forms of meal preparation depending on the cook, which may directly impact on the veracity of menu labeling available to the public. Process standardization minimizes failures in service operation, as it promotes compliance with the menu, standardization of yields and portions, and constancy of the nutritional value of culinary preparations. Technical datasheets are also relevant for specifying and forecasting purchase demand, budgeting, and controlling production time and costs.⁴⁴ For employees, standardization allows autonomous execution of tasks, without the need for frequent orders, and promotes safety in the work environment.⁴⁵

The presence and importance of a registered dietitian for implementation of qualitative menu labeling was highlighted. A participant reported that the dietitian's follow-up of kitchen activities during the study facilitated their work and promoted compliance with adjustments to the production process. Rebouças et al.⁴⁶ inferred that the presence of a registered dietitian in hotel restaurants positively influenced compliance with current health legislation and participation of food handlers in training, establishing a culture among workers. Cunha et al.⁴⁷ underscored that the presence of a dietitian as a food safety leader and adequate facilities are likely to improve food safety and reduce the risk of foodborne illnesses in food service establishments.

The only barrier to the implementation of qualitative menu labeling was mentioned by one of the operators (owner). Despite initially denying the existence of any difficulties, the owner subsequently stated that they commonly must opt for ingredients of lower nutritional quality owing to cost. The owner expressed concern about what diners would think after identifying this type of ingredient in menu labels. Thomas⁴⁸ noted that restaurant managers often express concern about the impact of menu labeling on sales. They fear it might lead to a decline in demand for their most profitable menu items or even that consumers might choose to have their meals in other establishments. On the other hand, the author argued that menu labeling stimulates restaurants to reformulate and improve the nutritional quality of their culinary preparations, especially when it is enforced by legislation.

Considering that participants did not report significant challenges in the implementation of the menu labeling, the ingredients list model is worthy of further attention and investigation. This advantage is particularly relevant because, as mentioned before, one of the major difficulties encountered in previous studies was the complexity of preparing quantitative information labels (calories and nutrients),^{24,25} a barrier the proposed qualitative model overcomes. Thus, it can be applied in different types of restaurants.

However, it is worth highlighting that even though it is easier to prepare than quantitative labeling, it is still important to have qualified employees who can accurately read and interpret the labels of processed and ultra-processed foods used in the restaurant's culinary preparations. Alternatively, seeking guidance from a nutritionist can be beneficial in this matter. The qualitative information model may be more reliable, particularly in a self-service buffet restaurant. Quantitative labeling may be more prone to errors since it needs the exact estimation of calorie and nutrient contents of the portion size⁴³ and due to the fact that serving sizes are chosen by diners themselves.

Strengths and limitations

This is the first study to examine operators' and employees' perspectives about the implementation of qualitative menu labeling, including the ingredients list, in a self-service buffet restaurant in Brazil. Another strength of this study is its qualitative nature. By collecting data through interviews, it was possible to capture information that might not be readily observable during the implementation process. Furthermore, it was possible to gather information from the employees' and operators' standpoint in interviews guided according to the study's objective.⁴⁹

Another strength of this research is that interviews were conducted during work hours, which allowed us to include all individuals who performed activities related to the implementation of menu labeling.

As a limitation, it should be noted that this preliminary exploratory study was conducted in a self-service buffet restaurant attached to a hotel, and its results cannot be generalized. Other qualitative studies may produce different results. Besides being open to the general public, the location attached to a hotel could

present distinct characteristics compared to other self-service buffet restaurants (e.g., number of employees available for the implementation of menu labeling, physical space to display the menu labeling, or financial resources to print the menu labeling). Nevertheless, the findings prompt reflections on employees' and operators' perceptions about the implementation of qualitative menu labeling in self-service buffet restaurants.

CONCLUSION

Qualitative menu labeling using the proposed ingredients list model was considered easy to implement by restaurant employees and operators alike. This study contributed to the field by presenting results that differ from those typically found in the literature, which mostly focus on the implementation of quantitative menu labeling, such as calorie and nutrient values. The proposed labeling strategy offers advantages to the food service establishment and the work routine of employees.

This study identified several facilitators, including greater recognition and appreciation of restaurant employees' work, consumer access to information, and improved standardization and transparency regarding the ingredients used in culinary preparations. Additionally, the study gathered valuable suggestions concerning the format in which menu labeling is presented.

As a pioneering study of employees' and operators' perspectives on the implementation of qualitative menu labeling in a self-service buffet restaurant, the results provide initial evidence of the importance of considering the viewpoint of these actors in the provision of menu labeling. The findings shed light on potential benefits that had not been previously recognized.

Finally, quantitative studies with a substantial sample size are suggested to investigate whether the findings of this study can be extrapolated to other scenarios. Qualitative studies are also suggested to explore diners' perceptions of the implementation of qualitative menu labeling.

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