Vigilância Sanitária em Debate
ISSN: 2317-269X
INCQS-FIOCRUZ

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Vigilância Sanitária em Debate, vol. 7, no. 3, 2019, pp. 73-79
INCQS-FIOCRUZ

DOI: https://doi.org/10.22239/2317-269X.01307

Available in: https://www.redalyc.org/articulo.oa?id=570566201011

EXPERIENCE REPORT
https://doi.org/10.22239/2317-269X.01307

The "prior communication" with exhibitors of cheese and meat sausages at the Family Farming Fair/RS/BR: a health education tool for the use of Sanitary Surveillance in mass events

A "comunicação prévia" com expositores de queijos e embutidos cárneos na Feira da Agricultura Familiar, RS/BR: um instrumento de educação em saúde para uso da Vigilância Sanitária em eventos de massa

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Received: Apr 18, 2019
Approved: Aug 6, 2019

ABSTRACT

Introduction: the Family Farming Fair mass event offers cheeses and meat sausages processed in family agroindustries in Rio Grande do Sul/BR. In many editions of the Fair, health inspectors found recurring inadequacies in the marketing of these products. **Objective:** to adjust the State's conduct regarding the inspection carried out by the Sanitary Surveillance in food create an instrument called "prior communication" with exhibitors, applying sanitary education with resource in the reduction of inadequacies in the food trade. **Method:** the "prior communication" was written reaffirming the co-responsibility between the Surveillance and exhibitors for consumers' health, as well as the inadequacies observed in previous editions. In the 2016 and 2017 editions, three months before the event, it was sent to the exhibiting agribusiness. to measure the influence of the instrument in reducing inadequacies, part of Annex II of RDC / Anvisa 43/2015 was used. **Results:** by comparing the inadequacies of the years 2014/15 with those of 2016/17, we find the following examples: the raw materials transported, stored and preserved, including temperature, from 62.50% of the stands decreased to 5.71% in 2016 and 14.21% in 2017; the temperature of the food kept in the exhibition and distribution equipment of 75.00% of the stands decreased to 60.00% in 2016 and 3.57% in 2017; the labeling item of 62.50% of the stands increased to 0% in 2016 and 2017. **Conclusion:** The instrument influenced the reduction of hazards in the food commercialization.

KEYWORDS: Health Surveillance; Product Safety for Consumer; Public Health Surveillance; Safe Food; Mass Events

RESUMO

Introdução: no evento de massa Feira da Agricultura Familiar são ofertados queijos e embutidos cárneos processados em agroindústrias familiares do Rio Grande do Sul/BR. Em muitas edições da Feira, os fiscais sanitários encontravam recorrentes inadequações na comercialização desses produtos. **Objetivo:** visando inovar a conduta da Vigilância Sanitária em alimentos na redução de riscos, foi criado o instrumento, denominado "comunicação prévia", para ser aplicado aos expositores e avaliado como recurso de educação em saúde. **Método:** a "comunicação prévia" foi redigida reafirmando a corresponsabilidade entre a Vigilância Sanitária e expositores para com a saúde dos consumidores, bem como foram listadas as inadequações observadas em edições anteriores. Nas edições 2016 e 2017, três meses antes do evento, esse instrumento foi enviado para as agroindústrias expositoras. Para aferir a influência do instrumento na redução de inadequações foi usada parte do Anexo II da RDC da Anvisa nº 43, de 1º de setembro de 2015. **Resultados:** Comparamos as inadequações dos anos 2014 e 2015 com as de 2016 e 2017, como exemplos: os itens matérias-primas transportadas, armazenadas e conservadas, incluindo temperatura, de 62,50% dos estandes passou para 5,71% em 2016 e 14,21% em 2017; a temperatura dos alimentos mantidos nos equipamentos para exposição e distribuição de 75,00% dos estandes passou para 60,00% em 2016 e para 3,57% em 2017; o item rotulagem de 62,50% dos estandes passou para 0% em 2016 e 2017. **Conclusão:** o instrumento exerceu influência na redução de riscos na comercialização dos alimentos.

PALAVRAS-CHAVE: Vigilância Sanitária; Segurança de Produtos ao Consumidor; Vigilância em Saúde Pública; Alimento Seguro; Eventos de Massa

INTRODUCTION

After Brazil was chosen as the host country of the 2014 FIFA World Cup and the 2016 Olympic and Paralympic Games, mass events began to receive special attention from the Brazilian health authorities. A demonstration of this attention was the issuance of Ordinance n. 1.139, of June 10, 2013, by the Ministry of Health[1], in which mass events are defined as:

> a collective activity of cultural, sports, commercial, religious, social or political nature, for a predetermined period of time, with exceptional concentration or circulation of people, of national or international origin, and which according to the assessment of threats, vulnerabilities and risks to public health require coordinated action by municipal, state and federal public health agencies, with the provision of special public and private health services.

Subsequently, the Brazilian National Health Surveillance Agency (Anvisa) issued Resolution of the Collegiate Board (RDC) n. 43, from September 1, 2015[2] which set the rules for the provision of food services in mass events, including minimum requirements for the prior assessment and operation of facilities and services related to food marketing and handling and definition of responsibilities[3].

Mass events require the strengthening of existing health services with the introduction of new health prevention and control methods, standard operating procedures and monitoring methods[3,4]. Therefore, in order to ensure the provision of safe food to the population, it is up to the health surveillance service to carry out actions to control the health risk in the marketing of food and food services.

Every year, the Brazilian state of Rio Grande do Sul hosts the International Exhibition of Livestock, Machinery, Implements and Agricultural Products (Expointer) in the Assis Brazil Park, in the city of Esteio, Metropolitan Area of Porto Alegre. Attended by 355,000 people in 2016 and by 411,000 people in 2017, it is considered the biggest mass event of the state[5]. Because of the large inflow of people at Expointer, there are countless opportunities for economic activities, including various forms of food supply. According to the report of inspectors from Esteio's health surveillance body, historically, in the exhibition, there are about 450 spots to be inspected.

This trade show is an important space for family farmers from Rio Grande do Sul to market their products, also because of the great popular demand for products of family-farming origin[6]. Therefore, in 1999 the Family Farming Market (FAF) was created at Expointer, with a dedicated pavilion for its operations. In 2017, the 19th FAF stood out in terms of percentage increase in sales at Expointer, with a total of BRL 2.85 million. There were 192 businesses in the Family Farming pavilion: 145 of family agribusinesses (food of animal and vegetable origin) and 47 of typical rural handicrafts from Rio Grande do Sul. In all, the show involved 1,340 families from 131 towns of Rio Grande do Sul. Cakes, wooden objects, typical cheeses and Italian salami were some of the products that sold out[7].

Among the group of foods of animal origin to which health surveillance pays special attention are the typical cheeses and cold cuts, which, due to the great demand by the show attendants, bring along several challenges, with critical points to be controlled in transportation, storage/stock and handling at the time of sale.

According to Law n. 8.080 of September 19, 1990[8], health surveillance comprises a set of actions capable of preventing, reducing and eliminating health risks. The reference to a set of actions shows that the lawmakers recognized that in order to reduce, decrease or eliminate risk factors, only one action, such as health inspection, is not enough. With that in mind, a scientific research project was designed to build a model of interactive intervention between food health surveillance and the society. This article reports on the design and application of an instrument called "prior communication" with exhibitors who marketed cheese and cold cuts at FAF in 2016 (39th Expointer) and 2017 (40th Expointer), and the verification of its influence on the reduction of non-conformities in the display and marketing of these products.

METHOD

Sample

FAF exhibitors were chosen as the target because this segment is organized in trade associations. Furthermore, family farms receive advice from the State Department of Rural Development, Fisheries and Cooperatives (SDR), which is responsible for organizing the event and could facilitate health surveillance's access to the exhibitors. This would enable that the instrument used for health education reached all of them.

The "prior communication"

The work done by Esteio's municipal health surveillance body in 2014 and 2015 made it possible to list the main non-conformities found in the booths that marketed cheese and cold cuts. In order to reduce this number, in 2016 Esteio's health surveillance body obtained from SDR/RS the list of future exhibitors. Three months before the start of the event, a memo called "prior communication" was sent to the exhibitors, drawing their attention to the responsibility shared by health surveillance and exhibitors for the health of the consumers, as well as listing the main non-conformities found and the need to address them. The "prior notification" memo included the requirements that health surveillance would make regarding, among other items, transportation hygiene, cold chain equipment, food handling (exhibitors' uniform and cash handling) and labeling specifications. In 2017, the distribution of "prior communication" relied on the structure of SDR/RS. That year, Esteio's health surveillance body participated in a meeting with

the associations that represented family farming, in which the objective of the "prior communication" was reinforced. The memo was also emailed to all family agribusinesses that had access to this medium of communication.

The 39th Expointer took place between August 27 and September 4, 2016, when 35 booths were inspected at FAF. Of these booths, 13 were cheese producers, 19 were cold cut producers and three were producers of cheese and cold cuts. At the 40th Expointer, which took place from August 26 to September 3, 2017, 28 agribusiness booths were inspected, eight of which were cheese, 16 cold cuts and four salami and cheese.

Evaluation instrument

The lack of systematic information regarding health surveillance inspections done in Esteio before 2016 limited the knowledge about which non-conformities were most recurrent. To fill this information gap, it was decided to carry out a retrospective historical record[9,10] with the professionals who inspected the food booths at FAF in 2014 and 2015. To this end, of the list of 56 items from Annex II of RDC n. 43, of September 2, 2015[2], called the Good Practice Assessment List for facilities and services related to food marketing in events, 41 items were selected, comprising only those applicable to the setting in question, the so-called short checklist.

The inspectors who worked in the previous editions of the event were asked to fill out the short checklist based on the situation they had observed in 2014 and 2015. Each item on this list should be given a score from 1 to 3. Score 1 indicated that, according to the inspector's recollection, there was little or no non-conformity in that item. Score 2 indicated non-conformity with some frequency and score 3 indicated very frequent non-conformity. Considering that the recollection-based questionnaire was given to eight inspectors, and wishing that the sum of the answers given by all inspectors for each of the items totaled 100%, each respondent's answer accounted for 12.5% (100 ÷ 8). In the analysis of their answers, we decided to prioritize those in which there was agreement on the evaluation of non-conformities (scores 2 and 3) by simple majority (5 or more) of the inspectors. Thus, of the 41 items of the short checklist, 11 were grouped into five blocks: transportation, equipment and cold chain, exhibitors' uniform, cash handling, and labeling.

The short checklist was applied by health surveillance inspectors on the first two days of opening and marketing of the show's products. In 2016, the 18th FAF (which took place inside the 39th Expointer) began on August 27. Then, 35 booths were inspected. Of these booths, 13 were cheese producers, 19 were cold cut producers and three were producers of cheese and cold cuts. In 2017, the 19th FAF (at the 40th Expointer) began on August 26, when 28 booths were inspected, eight of which were cheeses, 16 cold cuts and four salami and cheese. In both editions, the short checklist was applied by the same three inspectors.

In order to make a qualitative assessment of the exhibitors' perception of the convenience of health surveillance's prior submission of information regarding the previously found non-conformities, six questions were prepared to be asked after the inspection procedures of the booths: 1) Did the business receive any guidance from Esteio's health surveillance body on the health standards to be followed at Expointer 2016? 2) Do you think that the contact of the health surveillance body with the agribusinesses was important to clarify the rules to be adopted in the inspection work? 3) Were you already familiar with the legislation used by the health surveillance to inspect activities in trade shows like Expointer? 4) Did the prior communication of the rules by the health surveillance body facilitate the organization of the booth? 5) Do you think that the booth structure is compatible and compliant with what was previously informed in the health standards submitted to you? 6) Has your opinion about the health surveillance's inspection work improved because of the contact made through the prior communication memo?

RESULTS AND DISCUSSION

"Prior communication" design

The "prior communication" of 2016 was similar to that of the following year and was worded as follows:

> TECHNICAL GUIDELINES FOR EXHIBITORS
>
> 39th EXPOINTER 2016 - 18th Family Farming Market
>
> 1 Expointer 2016 Event Period:
>
> Period: From August 27th to September 4th.
>
> Family Farming Pavilion Opening Hours: 8:00 am - 8:00 pm
>
> 2 Booth organization and exhibitors' access:
>
> - On August 27th, exhibitors will have access to the venue for supply purposes at gate 01, from 6:00 am to 8:00 pm;
>
> - On the other days, the daily replacement of merchandise can be done between 10:00 pm and 6:00 am at gates 07 and 09.
>
> 3 Dear Exhibitor,
>
> The intent of this memo is to strengthen the co-responsibility relationship between those in charge of health surveillance, exhibitors and merchants of food of animal origin produced by family work, for the safety of the food offered to the consumers of these products.
>
> As you know, it is the responsibility of the health surveillance body to oversee the good practices of food transportation and marketing. We understand that the effort to offer quality products to the population cannot be jeopardized at the time of marketing.
>
> In order to strengthen the public interest and set clear rules for the producers who market their products at the Family Farming Market, regarding the transportation and

marketing of animal products (cheese and cold cuts), we are informing the standards that should be followed for the marketing of products of animal origin.

The inspection to be carried out by the health surveillance at the Family Farming Market in 2016 is mainly based on the following items:

3.1 The products must already be previously identified and individually labeled.

3.1.1 Products without labels or with unsorted labels (not adhered to the products) will not be accepted;

3.1.2 Dry and perishable food must be kept in good preservation conditions, in satisfactory hygienic and sanitary conditions and properly stored during transportation to the venue;

3.1.3 Products that require refrigeration during transportation must be in carried in refrigerated vehicles;

3.1.4 Products that do not require refrigeration may be transported in passenger cars, provided that they are kept in a place intended solely for food and which has been previously sanitized. Food products must not be mixed with personal objects and must be transported separately, according to their category, e.g. molasses apart from cakes, pasta apart from preserves. It is necessary to ensure the integrity of the food so that there is no mixing between foods of different categories;

3.2 Exhibitors must keep their light colored uniforms clean and in good conditions;

3.3 Cold room space may be used for products that require refrigeration, and the rooms must be arranged with food separated by category;

3.4 Exhibitors must have a copy of the health surveillance license and/or registration with the inspection service of their respective businesses, as this may be requested at any time by the competent bodies;

3.5 In tastings offered to the public, hygienic procedures should be followed, and two people must be simultaneously in each booth, one for handling food and one for handling money and marketing the products.

3.6 Legislation: Annex II of Resolution RDC n. 43 (National Health Surveillance Agency - Anvisa), of September 1, 2015. Provides for the provision of food services at mass events. **Official Gazette**, n. 168, of September 2, 2015.

Should you have any questions, please contact us.

XXX XXXXXX
Health Surveillance Inspector - Esteio
Email: xxxxxx@xxxx.xxx.xx
Phone: (xx) xxxxxxxx

Qualitative evaluation

Table 1 shows the frequencies of the answers given by the cheese and cold cut exhibitors when questioned by the health surveillance inspectors.

Based on the number of exhibitors who said they had received the memo, we found that the decision to use the SDR/RS structure to deliver the memo to the family agribusinesses was right.

With a relative frequency of 94.26% of positive answers in question 2 and 97.14% in question 6, we confirmed the health surveillance inspectors' perception that the exhibitors who had received the memo were more receptive at the time of booth inspection. This result also reinforces the hypothesis that changes in the State's (here represented by the health surveillance body) interventions and procedures can improve its relationship with society and, in this case, enhance health protection actions.

Similarly, the absolute frequency of answers to questions 3, 4 and 5 also showed that the strategy of previously clarifying the guidelines that orient health surveillance actions may lead to more compliant food exhibitors and, therefore, reduce friction with inspectors and increase consumer health protection.

This information enables us to assume that this prior approach improved the quality of the relationship between inspectors and inspected parties. It is now necessary to use empirical data to check how this prior contact affects compliance or

Table 1. Absolute frequencies of qualitative questions applied to exhibitors of the 35 booths inspected at the Family Farming Market (Expointer) in 2016.

Questions	Yes	No	NA
1. Did the business receive any guidance from Esteio's health surveillance body on the health standards to be followed at Expointer 2016?	34	-	1
2. Do you think that the contact of the health surveillance body with the agribusinesses was important to clarify the rules to be adopted in the inspection work?	33	1	1
3. Were you already familiar with the legislation used by the health surveillance to inspect activities in trade shows like Expointer?	1	33	1
4. Did the prior communication of the rules by the health surveillance body facilitate the organization of the booth?	33	1	1
5. Do you think that the booth structure is compatible and compliant with what was previously informed in the health standards submitted to you?	-	34	1
6. Has your opinion about the health surveillance's inspection work improved because of the contact made through the prior communication memo?	34		1

NA: No answer

non-compliance with health surveillance procedures, comparing the data obtained with the perception of non-conformities from previous years.

Frequency of non-conformities in good marketing practices

In order to check whether or not the "prior communication" memo had influenced the reduction of non-conformities in food marketing practices, the relative frequency of data obtained from the health surveillance short checklist in 2016 and 2017 was compared with the relative frequency data reported in the 2014 and 2015 recall.

Tables 2, 3 and 4 show data on the relative frequency of non-conformities with checklist items, according to predetermined blocks. The Tables are composed of five columns: in the first two are recorded the items that, in the perception of the simple majority of health surveillance inspectors, were found non-conformities; the third says how often they perceived non-conformities ("frequent" and "very frequent" were accounted together) in 2014 and 2015; in the fourth column, the non-conformities observed in the 35 exhibitor booths marketing cheese and cold cuts in 2016 and in the fifth column the non-conformity frequency in the 28 booths of the 2017 edition.

Since in the 2016 edition of the show the checklist was applied to 35 booths, the relative frequency of each booth was 2.85%. In the 2017 edition, it was applied to 28 booths, with a relative frequency of 3.57%.

As can be seen in Table 2, comparing 2016 and 2017 data with data from the years before the use of "prior communication", there was a substantial reduction in the number of non-conformities. In the item of Raw materials and supplies, in 2016, only two (5.71%) exhibitors had non-conformities. From another angle, 33 (95.28%) of the 35 booths were compliant, and in the previous years, in this item, non-conformities in transportation temperature were "frequent" and "very frequent". In 2017, four (14.21%) booths were non-compliant. The reduction in non-conformities or the increase in proper conditions of good practices was even greater in the items of Pre-prepared food and Not-approved food. If we relate these results with the exhibitors' good receptivity to the "prior communication", this may have been the reason for the increased safety in the transportation and handling of food.

Table 3 shows the cold chain results. Regarding temperature monitoring, the item of Temperature of food, block of equipment and cold chain, in 2016 there were 21 (60.00%) non-compliant booths, which was similar to previous years. However, in 2017 only one (3.57%) of the booths was non-compliant. We can infer that the exhibitors got a better understanding of the standards due to the repetition/reinforcement of the orientations.

Regarding the sizing of refrigeration equipment, item of Display equipment, from 2016 to 2017 there was a relative decrease in non-compliant equipment: in 2016 there were seven booths (20.00%) in this condition and in 2017 there were

Table 2. Relative frequency of non-conformities in 2014 and 2015 and in 2016 (n = 35) and 2017 (n = 28), referring to the transportation block.

Items of RDC n. 43/2015	Block	Frequency of non-conformities in 2014 and 2015	Frequency of non-conformities in 2016	Frequency of non-conformities in 2017
Raw materials and supplies transported, stored and preserved under conditions indicated by the manufacturer, including temperature	Transportation	62.50%	5.71%	14.21%
Pre-prepared and prepared foods are transported at appropriate temperature and vehicles.	Transportation	100.00%	2.85%	3.57%
Non-approved foods are not unloaded. If unloading is necessary, non-compliant foods are identified and stored separately until final disposal.	Transportation	75.00%	0%	7.41%

Table 3. Relative frequency of non-conformities in 2014 and 2015 and in 2016 (n = 35) and 2017 (n = 28), referring to the equipment and cold chain block and to the exhibitors' uniform block.

Items of RDC n. 43/2015	Blocks	Frequency of non-conformities in 2014 and 2015	Frequency of non-conformities in 2016	Frequency of non-conformities in 2017
Temperature of food kept on display and distribution equipment is monitored	Cold chain and equipment	75.00%	60.00%	3.57%
Equipment for display and distribution of prepared foods is properly sized and in proper conditions of hygiene, conservation and operation.	Cold chain and equipment	62.50%	20.00%	10.71%
Handlers have their hair up and protected by nets, caps or other suitable accessory for this purpose.	Exhibitors' uniform	87.50%	51.43%	46.42%
Handlers are wearing uniforms that are compatible with the activity, clean and well-kept	Exhibitors' uniform	75.00%	37.40%	57.14%

Table 4. Relative frequency of non-conformities in 2014 and 2015 and in 2016 (n = 35) and 2017 (n = 28), referring to the cash handling block and the labeling block.

Items of RDC n. 43/2015	Blocks	Frequency of non-conformities in 2014 and 2015	Frequency of non-conformities in 2016	Frequency of non-conformities in 2017
Presence of a separate area for payment activities, and the employees responsible for this activity do not handle prepared, packaged or unpackaged food	Cash handling	87.50%	91.43%	50.00%
Materials and supplies of certified origin	Labeling	62.50%	0%	0%
Raw materials and supplies used in accordance with their expiration date and proper conditions	Labeling	62.50%	0%	0%
Foods prepared outside the show venue have the following information: identification (product name, producer name, and address), date and time of preparation, storage temperature and expiration date	Labeling	75.00%	2.85%	0%

only three (10.71%). The possible reason for the better use of the cold chain by the exhibitors was the improvement in the structural conditions offered by the event organizers, since in 2017 container-like storage coolers were made available, which reduced the amount of food in the booths' refrigerated counters. This was noticed in conversations with the exhibitors, since in 2016, of the 35 exhibitors, 34 (94.28%) recognized that the structure was incompatible with health surveillance standards.

In the items of Handlers' hair and How handlers' present themselves, referring to the uniforms of these handlers, non-conformities were found in 18 (51.43%) and 13 (37.40%) booths in 2016, and 13 (46.42%) and 16 (57.14%) in 2017. A possible hypothesis to explain this still high number of non-conformities in these items may be the fact that the production of uniforms is the responsibility of the agribusiness associations that participated in the exhibitors' organization. Since the uniforms were handed out during the show, many did not have access to them on the first days of activity.

As shown in Table 4, we can see that in the item of Presence of a separate area, non-conformities remained high. In 2016, 32 (91.43%) of the 35 booths remained in this condition. However, in 2017, there was already some improvement in good practices, since only half (14 - 50%) of the booths were non-compliant. In this regard, the health surveillance inspectors highlight that the booth design hampered hygiene procedures between the handling of cash and food. Several exhibitors also noticed this difficulty, and the inspectors heard reports that the booth structure was not compatible with this health surveillance standard.

Regarding the items of Raw materials, Raw materials and supplies and Prepared foods, which are the sole responsibility of the agribusinesses/exhibitors, there was a substantial reduction in non-conformities when compared to those noted in the 2014 and 2015 recall. In the 2016 and 2017 editions, there was compliance in virtually 100% of the booths. This great improvement in compliance can also be attributed to the prior communication, since, as previously pointed out, in the conversations with the exhibitors through the questions, in 2016, 94.28% of them reported that the previous contact made by the health surveillance service was important to make them adopt appropriate marketing procedures.

CONCLUSIONS

The "prior communication", understood as an instrument of education for health promotion and as part of the changes made by the State in its procedures of food health surveillance inspection, triggered a qualified and cooperative approach between the regulatory and the regulated sectors, since the inspection rules were previously explained to the exhibitors. The increased adoption of good marketing practices by family agribusiness exhibitors in the two FAF editions surveyed can be attributed to this procedure.

The use of a health education instrument shared with the regulated sector in advance helped reduce the risks of health problems. However, this proposition made by the health surveillance could only come about because of the type of organization of family farming exhibitors, and it may not be generalized to all segments that marketed food at the mass event.

REFERENCES

1. Ministério da Saúde (BR). Portaria N° 1.139, de 10 de junho de 2013. Define, no âmbito do Sistema Único de Saúde (SUS), as responsabilidades das esferas de gestão e estabelece as Diretrizes Nacionais para Planejamento, Execução e Avaliação das Ações de Vigilância e Assistência à Saúde em Eventos de Massa. Diário Oficial União. 11 jun 2013.
2. Agência Nacional de Vigilância Sanitária - Anvisa. Resolução RDC N° 43, de 1 de setembro de 2015. Dispõe sobre a prestação de serviços de alimentação em eventos de massa. Diário Oficial União. 2 set 2015.

3. Agencia Nacional de Vigilância Sanitária – Anvisa. Guia para atuação da vigilância sanitária em eventos de massa: orientações para o gerenciamento de risco. Brasília: Agencia Nacional de Vigilância Sanitária; 2016[acesso 20 nov 2018]. Disponível em: http://jogos.anvisa.gov.br/documents/2892371/0/guia+de+eventos+de+massa_FINAL_10_Junho_2016.pdf/d5cd8579-112f-4476-8ceb-7731c19d942b
4. World Health Organization – WHO. Public health for mass gathering: key considerations. Geneva: World Health Organization; 2015[acesso 17 abr 2017]. Disponível em: http://apps.who.int/iris/bitstream/10665/162109/1/WHO_HSE_GCR_2015.5_eng.pdf
5. Expointer. Números da Expointer. Esteio: Expointer; 2018[acesso 21 set 2018]. Disponível em: http://www.expointer.rs.gov.br/numeros-da-expointer
6. Winck CA, Scarton LM, Zonin VJ, Silva TN. Inserção da agricultura familiar na expointer: redes sociais do agronegócio. Rev Est Debate. 2011:18(1);77-92.
7. Secretaria Especial de Agricultura Familiar e do Desenvolvimento Agrário (BR). Pavilhão da agricultura familiar bate recorde de vendas na Expointer. Brasília: Ministério da Agricultura, Pecuária e Abastecimento; 2017[acesso 20 abr 2018]. Disponível em: http://www.mda.gov.br/sitemda/radio-mda/pavilh%C3%A3o-da-agricultura-familiar-bate-recorde-de-vendas-na-expointer
8. Lei N° 8.080, de 19 de setembro de 1990. Dispõe sobre as condições para a promoção, proteção e recuperação da saúde, a organização e o funcionamento dos serviços correspondentes e dá outras providências. Diário Oficial União. 20 set 1990.
9. Kerlinger FN. Metodologia da pesquisa em ciências sociais: um tratamento conceitual. São Paulo: Universidade de São Paulo; 1988.
10. Fisberg RM, Slater B, Martini LA. Métodos de inquéritos alimentares. In: Fisberg RM, Slater B, Marchioni DML, Martini LA. Inquéritos alimentares: métodos e bases científicos. Barueri: Manole; 2005.

Conflict of Interest

Authors have no potential conflict of interest to declare, related to this study's political or financial peers and institutions.