

Perceptions of dietitians and key role players regarding their role in reporting food labelling transgressions in South Africa

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Objectives: A study was undertaken to describe South African dietitians and key role players' perceptions regarding their role in reporting food labelling legislation transgressions.

Design: A multimethod study design was employed to explore a previously unstudied topic.

Setting: Dietitians registered with the Health Professions Council of South Africa (HPCSA) together with key role players in food labelling in South Africa.

Methods: Quantitative data were collected using a self-administered electronic questionnaire and qualitative data using a semi-structured interview guide. Quantitative data were analysed using Microsoft Excel and qualitative data using ATLAS.ti software. Data were analysed independently in the results section but integrated for interpretation of the findings.

Results: In total, only 6% ($n = 7$) of the included dietitians ($n = 126$) reported food labelling transgressions, and 12% ($n = 15$) believed dietitians have a role to play in reporting transgressions. Interestingly, half of the included dietitians (50%, $n = 63$) stated they would report an identified transgression. Dietitians demonstrated a lack of awareness of the current food labelling regulations, with 43% wrongly identifying the draft regulation to consult. Almost all (99%, $n = 125$) of the included dietitians reported that their transgression reporting practices would improve if a clear guideline from the Department of Health: Directorate Food Control (DoH DFC) was available. Key role players ($n = 8$) cited enforcement issues and a perceived gap in dietitians' understanding of legislation and reporting processes as barriers to reporting non-compliance. Key role players identified enablers such as awareness of regulations, contacts within the DoH DFC and familiarity with the reporting process for transgressions. They also provided insight on the proper procedure for reporting food labelling transgressions.

Conclusion: The low prevalence of food labelling transgression reporting by dietitians stems from several barriers, including a perceived lack of confidence regarding the current regulation, awareness of the applicable legislation, uncertainty regarding the correct reporting procedure and scepticism that transgression reports will be acted upon. Regular communication regarding food and nutrition regulations and the development of an easy-to-use transgression reporting framework could support the implementation and impact of food labelling regulations in South Africa.

Keywords: dietitian, food labelling, food industry, legislation, transgression

Introduction

In South Africa non-communicable disease (NCD) prevalence is increasing year on year, with 51% of all deaths in 2018 being attributable to NCDs according to the World Health Organization (WHO).¹ Accurate nutrition information and food labelling are recognised as one of the best strategies to combat obesity and NCD prevalence worldwide.² Food labels are important communication tools from manufacturers to consumers as they provide critical information concerning the food product.³ The current food labelling regulation in South Africa (R.146 of 2010), which came into effect in 2012, was meant as interim legislation until the publication of more comprehensive labelling legislation.⁴ In the past decade, two draft regulations were published for comment, the most recent draft being published in April 2023 (R.3337). The newest draft regulation (R.3337) is a much more comprehensive regulation, including information on various claims, front-of-pack warning labels, mandatory nutrition labelling and more. However, for the foreseeable future, the limited R.146 regulation remains the current and enforceable labelling regulation in South Africa.⁵ No guidelines exist within R.146 on how to report food labelling transgressions.

Food labels in contravention of the current labelling regulation (R.146) exist in South Africa⁶ and unfortunately, a perceived lack of enforcement of this legislation exists.⁷ When consumers purchase and consume mislabelled food, they are placed at a disadvantage as they may be consuming foods that they believe are healthful, or even have health-promoting properties, when the opposite may be true.⁸ This misleads consumers and does not support obesity prevention strategies. Unfortunately, it has been reported that South African consumers struggle to interpret the information presented on food labels, especially the technical terminology that is often present on a food label.^{9,10} Therefore, food labelling legislation that simplifies or supports consumers to interpret food labels is essential as this may support better food choices. Dietitians are key stakeholders in preventing and managing obesity and NCDs and often use food labels to classify foods for nutrition interventions.¹¹ Dietitians are experts in nutrition, and play a key role in nutrition interventions, specifically in the form of nutrition education.¹¹ If dietitians play a larger role in reporting food labelling transgressions, enforcement of the regulation will improve, ultimately resulting in a better outcome for the public. There is a paucity of data within low- and medium-

income countries (LMIC) on the monitoring and enforcement of food labelling legislation.

At present, the perceptions and reporting practices of labelling non-compliance of South African dietitians are unknown. Additionally, little is known regarding the barriers and enablers experienced in reporting labelling transgressions, as well as the correct non-compliance reporting process.

This research study aimed to describe the perceptions of South African dietitians regarding their role in reporting food labelling transgressions as well as the barriers and enablers they experience; to describe the perceptions of key role players of how food labelling transgressions should be reported as well as the barriers and enablers they experience; and to identify possible factors to include in the development of a suggested framework for reporting food labelling transgressions.

Methods

Study design

A multi-method design was employed, utilising a quantitative method (online self-administered questionnaires) and a qualitative method (semi-structured interviews) to explore a previously unstudied area.¹² Figure 1 depicts the conceptual framework of the study.

Study population

Quantitative stream: registered dietitians in SA

Dietitians registered with the Health Professions Council of South Africa (HPCSA) formed the population for the quantitative stream. Data were collected by means of an online self-administered questionnaire. Participants were recruited through various channels, including the Association for Dietetics in South Africa (ADSA), Dietetics Nutrition Is a Profession (DIP)

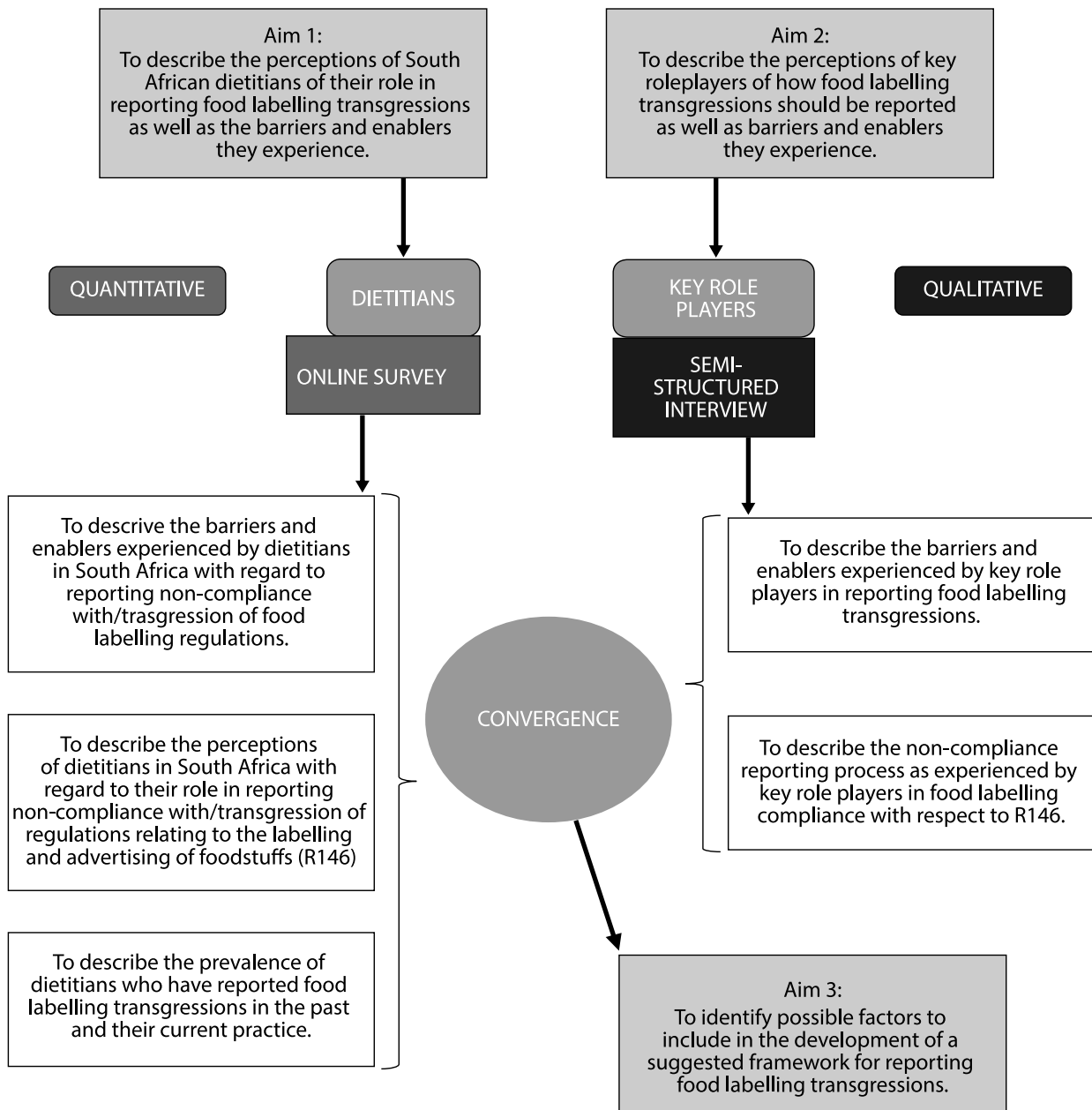


Figure 1: Conceptual framework.

and social media. Snowball sampling was used to achieve a sample size of at least 105 participants based on a total population of 5 490 dietitians, giving a precision level of 10%. This was based on an assumption that at least 50% of dietitians who have encountered a food labelling transgression would have reported it. A total of 126 participants took part, bringing the precision to 9%.

Qualitative stream: key role players in food regulatory environment in SA

Eight key role players in food labelling legislation in South Africa were purposively identified and included in the study due to their known involvement in the food regulatory environment. These included a medical doctor, lawyer, food scientist, representative from the DoH DFC, a representative from the Consumer Goods Council, a university lecturer, a regulatory affairs manager at a food company, and a dietitian working as a consultant to the food industry. Data were collected by means of a semi-structured interview.

Data collection

For the quantitative data collection (dietitians) stream of the study, a link to the self-administered electronic questionnaire was sent to potential participants to access over a period of six weeks (February and March 2022). At the time of data collection, R.146 was (and remains) the current legislation, whilst R.429 of 2014 was the draft legislation, with R.3337 of 2023 being the prevailing draft legislation as of 21 April 2023.⁵ The questionnaire consisted of 55 questions. For the qualitative data collection (key role players) stream of the study, semi-structured, audio-only recorded interviews were conducted in April and May 2022.

Self-administered electronic questionnaire

The electronic questionnaire was developed by the researcher, similar to that of Lidgard and Yeatman,¹³ to align with the research objectives. The questionnaire was self-administered and was hosted on the SUNsurvey platform. The questionnaire was checked for content validity by a dietitian with expertise in food-labelling legislation and was piloted by 10 dietitians. A minor revision was made to address bias in one question before data collection began.

Semi-structured interview

A semi-structured interview guide was compiled to align with the research objectives. The following topics were included in the interview guide: the transgression-reporting procedure followed; barriers and enablers to transgression reporting; relevant legislation consulted ahead of reporting transgressions; efficacy of transgression reporting; and recommendations for future practice. The interview guide underwent content validity review by a food labelling legislation expert and was adjusted based on the feedback received. Trustworthiness of qualitative data was assured by (1) credibility where the findings were cross-validated with quantitative data, and validation of the interview guide by an expert; (2) confirmability, utilising a clearly defined coding system and computer-aided qualitative data analysis software (ATLAS.ti; <https://atlasti.com/>) to generate themes; and (3) dependability, where the same rigorous approach to data collection and analysis was used for all of the interviews as these were done by the same interviewer; (4) confirmability was achieved by the researcher applying reflexivity to address any internal bias; additionally the findings were discussed together.

Data analysis

Data for the quantitative stream (dietitians) and qualitative stream (key role players) were analysed separately and the results were integrated in the interpretation and discussion stage.

For the quantitative stream (dietitians), questionnaire data were analysed using Microsoft Excel® (Microsoft Corp, Redmond, WA, USA) for descriptive statistics. Once anonymised, qualitative data (key role players) were analysed using the Braun and Clarke thematic analysis method,¹⁴ with the use of ATLAS.ti® software.

Findings were integrated following the analysis of each stream by identifying commonalities and discrepancies between the quantitative (dietitians) and qualitative (key role players) streams. The quantitative stream revealed dietitians' perceptions and practices, and the qualitative stream described the key role players' experiences.

Ethical considerations

This research obtained ethics approval from the Health Research Ethics Committee at Stellenbosch University in July 2021 (S21/05/097). Informed consent was obtained from all participants.

Results

Sample characteristics

For the quantitative stream, 126 dietitians completed the electronic questionnaire. For the qualitative stream, eight key role players were interviewed.

Demographic characteristics of the dietitians who took part in the questionnaire are displayed in Table 1. The response rate for the questionnaire was low, at 2.29% of all registered dietitians in South Africa at the time of data collection ($n = 5\ 490$). The majority of the participants were female (95.5%), with 45% ($n = 57$) residing in Gauteng. More than half (52%) of the participants received undergraduate training on the food labelling legislation. The mean number of years in practice was 9.92 years, coinciding with the current legislation (R.146) that has been in place since 2010.

The perceptions and practices of dietitians

Figure 2 indicates dietitians' perceived role in food labelling. Only 12% ($n = 15$) of dietitians felt dietitians have a role to play in reporting food labelling transgressions.

The majority (20%, $n = 25$) of the participants believed that the responsibility for reporting food labelling transgressions lay with the Association for Dietetics South Africa (ADSA), while only 19% ($n = 24$) believed it to be the responsibility of individual dietitians.

A summary of dietitians' self-reported practices for reporting food labelling transgressions is included in Table 2. Most dietitians (63%, $n = 80$) do not feel confident in the reporting process but show a willingness to report transgressions (50%, $n = 63$ of dietitians agreed).

Only 6% ($n = 7$) of dietitians indicated that they had reported a labelling transgression in the past. Of these, only three indicated they followed a standard process. Only 2% ($n = 3$) of the respondents correctly identified 'the local municipality where the product is manufactured' as the appropriate reporting stakeholder (Figure 3).

Table 1: Demographic information on study participants for the quantitative stream ($n = 126$)

Characteristic	Category	<i>n</i>	(%)
Gender	Male	5	(4.0)
	Female	120	(95.2)
	Other	1	(0.8)
Province	Eastern Cape	4	(3)
	Free State	5	(4)
	Gauteng	57	(45)
	KwaZulu-Natal	19	(15)
	Limpopo	5	(4)
	Mpumalanga	3	(2)
	Northern Cape	2	(2)
	North West	8	(6)
	Western Cape	23	(18)
	Category of practice (multiple options)	Clinical nutrition (hospital based)	46
Community nutrition (outpatient care based)		11	(5)
Combination of clinical and community nutrition		35	(17)
Foodservice management		18	(9)
Industry (sales representatives, etc.)		8	(4)
Academia/education		21	(10)
Private practice		11	(5)
Other		58	(28)
Education on food- labelling regulations (multiple options)	Undergraduate studies	84	(52)
	Postgraduate studies	5	(3)
	Both postgraduate and undergraduate studies	11	(7)
	Other training received	16	(10)
	Continuing professional development (CPD)	30	(19)
Years in practice (mean \pm SD).	9.92 (\pm 7.9)		

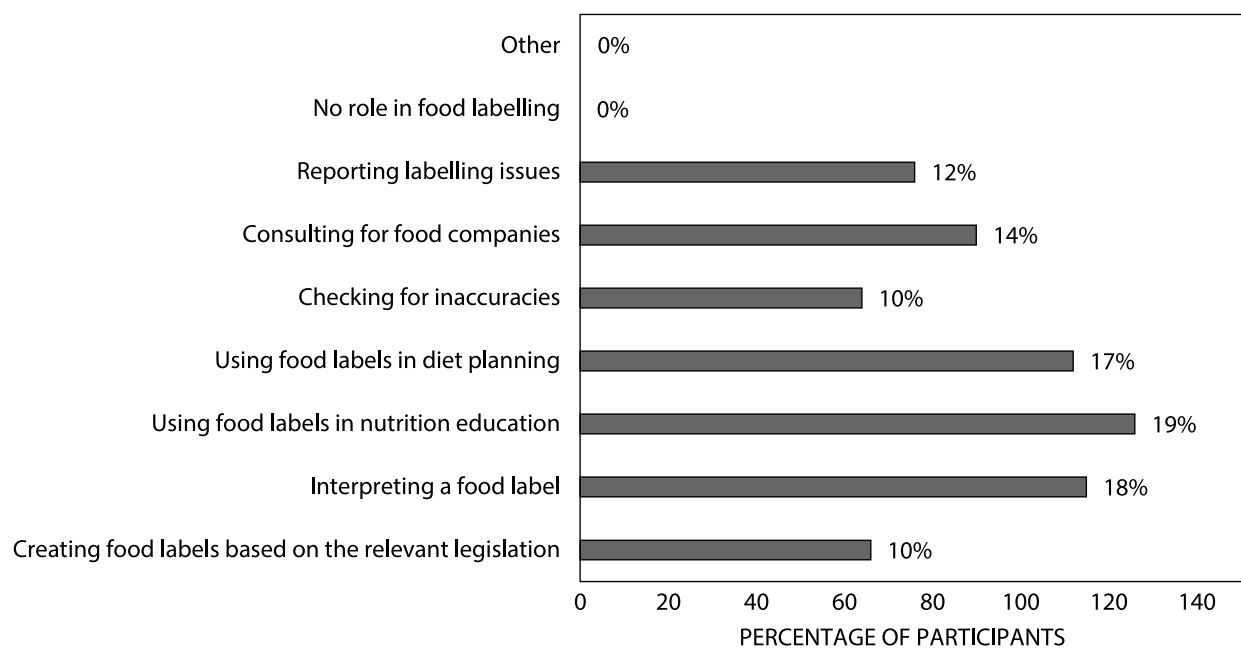
Figure 2: Dietitians' perceptions of their role in food labelling ($n = 126$).

Table 2: Food-labelling non-compliance reporting practices of dietitians (n = 126)

Reporting practices (n = 126)	Disagree, n	(%)	Agree, n	(%)	Don't know, n	(%)
I am confident in the process of reporting food-labelling transgressions	80	(63)	41	(33)	5	(4)
If I noticed a food-labelling transgression, I would report it	43	(34)	63	(50)	20	(16)
If I was uncertain of whether a food label was accurate, I would consult labelling regulation R.146	32	(25)	63	(50)	31	(25)
If I was uncertain of whether a food label was accurate, I would consult labelling regulation R.429	44	(35)	54	(43)	28	(22)
I use food labels as a tool to educate my patients	5	(4)	120	(95)	1	(1)
I consult R.146 to familiarise myself with nutrient content claims	61	(48)	57	(45)	8	(6)
I educate my patients on food labelling using the information on health claims as laid out in R.146	52	(41)	60	(48)	14	(11)
Clear guidance on a reporting procedure would increase reporting	1	(1)	125	(99)	-	-
Education on the relevant legislation, e.g. as a CPD activity, would increase reporting	5	(4)	121	(96)	-	-

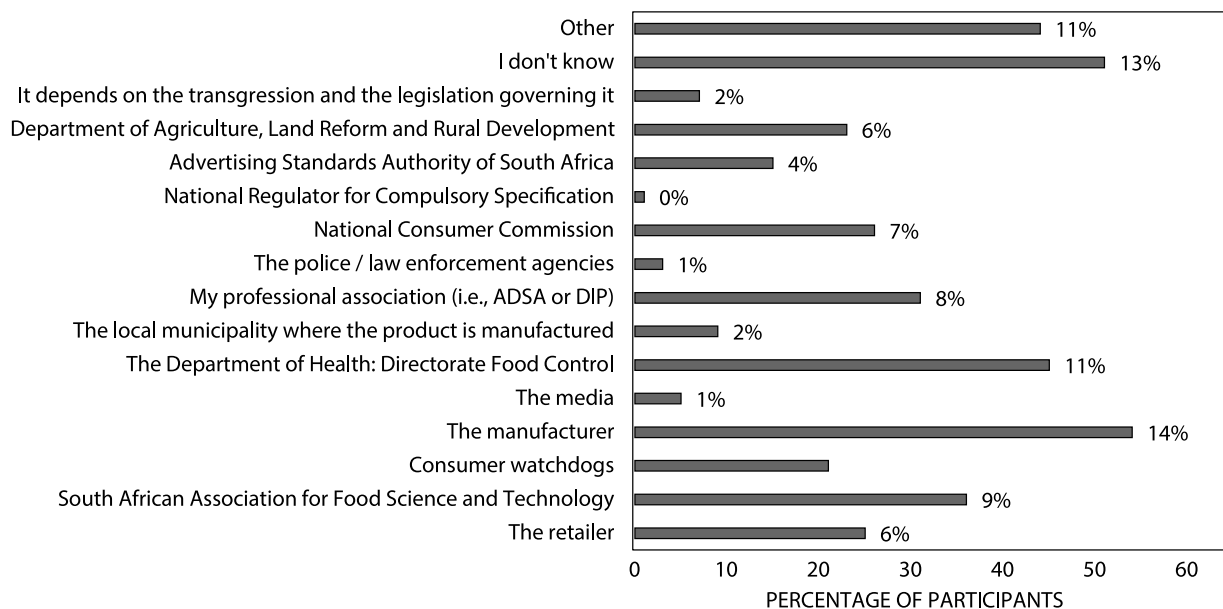


Figure 3: Dietitians' perceptions of the appropriate stakeholder to whom to report food-labelling transgressions (n = 126).

The non-compliance reporting process as experienced by key role players

Theme 1: Food labelling regulations and guidelines

Key role players either did not know whether there was a set of published guidelines on reporting non-compliance with R.146, or confirmed that no published reporting guidelines exist:

'R.146, the regulations, are silent on the process of lodging a complaint or reporting a transgression, they are silent. There are no sub-regulations that are actually addressing that.' (Key role player 7)

Theme 2: Consequences of perceived ineffective enforcement of R.146

The key role players perceived the food control system in South Africa to be dysfunctional, and this resulted in three main consequences of ineffective enforcement being elicited. These were: (1) continued and blatant transgressions of the regulations as there are no clear consequences for manufacturers:

'At the moment, food industries like "Oh no. Well, you know our competitors are doing it. So, we're going to do it because we need to sell the product which can't fault that thinking because it's going to be a competitive environment.'" (Key role player 8)

(2) deliberate inappropriate labelling as a means of competing with other manufacturers, and (3) the need to seek recourse using litigation based on unfair competition:

'What we have done is we have launched an unlawful competition case.' (Key role player 6)

When exploring why this might be the case, the key role players described the DoH DFC as ineffective, and there were four main reasons for this. These were:

(1) poor leadership:

'It's basically leaderless to a degree that they've got a poor leader at the moment.' (Key role player 3)

(2) lack of resources, (3) lack of understanding of the legislation and (4) the advisory nature of the DoH DFC:

'Now, there has been a plea for the Department Directorate of Food Control to be given the power to set up a dedicated inspection team of their own.' (Key role player 6)

Enforcement of R.146 was discussed and the perception was that the enforcement of R.146 is almost non-existent:

'The real problem is, is that some municipalities are just not functional. So, there is actually no one to lodge a complaint to. Even if you file a complaint, no one answers.' (Key role player 6)

Since the inception of R.146 there has not been any known instance of prosecution of a manufacturer for non-compliance with R.146, and hence there have been unclear consequences or penalties for transgressors, as was noted by some key role players and then confirmed by the key role player from the DoH:

'So, we have not as yet tested the regulations in a court of law.' (Key role player 7)

Owing to the advisory nature of the DoH DFC's role in food labelling, it is unable to enforce regulations and this falls to the local Environmental Health Practitioner (EHP) in the manufacturing district. Due to a lack of resources, high workload and limited support, including lack of awareness and training, the EHPs are not well equipped to enforce R.146.

Theme 3: Recommendations for a way forward

The key role players gave recommendations for a way forward, with possible methods of addressing the problems at hand. A recommendation for future practice of reporting food labelling transgressions is to have a tool or checklist available for dietitians/industry/consumers to fill in and send to the EHP in the manufacturing locality. This tool/checklist would cover the main aspects of food labelling regulations and would aid in clarifying to the EHP which section and subsection of R.146 the product is in contravention of:

'... to put together a simple, user-friendly summary of how to go about it right.' (Key role player 7)

Other recommendations were that reporting should be done anonymously as whistle-blowers do not want to be

drawn into disputes; a single point of contact to report to; published guidance from the DoH DFC; training from the DoH DFC; ongoing continuing professional development from professional associations; a functional website/app; and even restructuring of food labelling control in South Africa.

Barriers and enablers experienced by dietitians and key role players

Barriers to reporting transgressions of R.146 (key role players)

The key role players' barriers to reporting food labelling transgressions were discussed in detail, and it was determined that there are three main barriers to reporting transgressions of R.146. These barriers are: (1) dietitians' lack of knowledge of R.146:

'I've spoken to other dietitians who really don't understand food labelling.' (Key role player 2)

(2) uncertainty regarding to whom to or where to report transgressions; and uncertainty of the reporting procedure:

'... so with R.146 all what I can say is that I have checked and it's not clear, the way of actually reporting, you know, reporting the regulations you would not know where to report the regulations.' (Key role player 7)

(3) lack of feedback on previous reported transgressions; the preparation involved to report; potential consequences that may arise from reporting:

'It's like being a witness to a crime.' (Key role player 2)

and a sense of reporting transgressions not being in the spirit of good industry practice.

Barriers to reporting transgressions of R.146: dietitians

Almost two-thirds of the participants (59.5%, $n = 75$) indicated that they had found a food-labelling transgression in the past but decided not to report it. Reasons for not reporting labelling transgressions are shown in Figure 4, with the main reason being that they were unsure to whom or where to report it (39%, $n = 49$) and perceiving that their report would not result in remedial action (28%, $n = 35$).

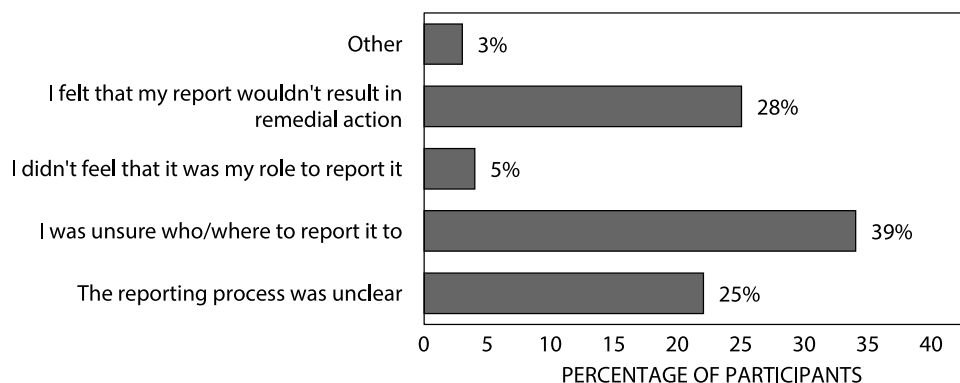


Figure 4: Reasons why dietitians did not report food-labelling regulation transgressions ($n = 88$).

Enablers to reporting food labelling transgressions: key role players

Key role players' enablers to reporting food labelling transgressions were identified as knowledge of R.146, and having professional contacts within the appropriate department:

'I would say that I would know whom to report to ... I actually WhatsApp the relevant person.' (Key role player 6)

or having a colleague/contact in an advocacy group with expert knowledge of reporting transgressions:

'... FLAG – Food Legislative Advisory Group. It's about 24 people who I meet with twice a year with the Director of Food Control.' (Key role player 3)

The ease of reporting and having in-depth knowledge of the food labelling regulations:

'I think my training and my involvement in labelling should be an enabler for me. I should be more alert to it and actually do something about it.' (Key role player 8)

Enablers to reporting food labelling transgressions: dietitians

In an open-ended question, dietitians who had reported a food labelling transgression ($n = 7$) reported the following enablers to the process: (1) having a good understanding of the legislation (R.146), (2) reporting the transgression directly to the DoH DFC, and (3) consulting with activist groups.

The findings regarding enablers are consistent across both streams of the study, with both dietitians and key role players identifying knowledge of regulations, contacts within the DoH DFC and colleagues with expertise in food labelling as facilitators for reporting non-compliance with R.146.

Discussion

This study found that dietitians in South Africa believe they have a role to play in reporting food labelling transgressions, as more than 50% would be willing to report a transgression if one were identified, and 12% considered that reporting labelling transgressions is a role of the dietitian. Our findings suggest that South African dietitians lack sufficient knowledge of food labelling regulations, which hinders their ability to report non-compliance. Only 6% of the included dietitians reported instances of food labelling transgression reporting. A recent study on the perspectives of dietitians on the Regulations Relating to Foodstuffs for Infants and Young Children (R.991) reported the prevalence of dietitians reporting non-compliance with R.991 to be 16%, which is 10% greater than the reporting of transgressions in our study.¹⁵ A possible reason for a higher prevalence of reporting non-compliance could be that R.991 has a clear stipulation on how to report non-compliance and to whom these reports should be addressed.¹⁶ This is further enhanced by the availability of the Code Watch tool¹⁷ and dedicated email address through which complaints can be lodged and followed up.

Barriers to reporting food labelling transgressions in South Africa have been investigated by Clarke et al. in 2021,¹⁵ focusing specifically on R.991. However, there is little literature available examining the barriers faced by dietitians and other stakeholders when reporting non-compliance with other food

labelling regulations in South Africa. To date, there are more studies exploring the perceptions and knowledge of consumers regarding South African food labels.^{4,18} Internationally, there is limited evidence of the role of healthcare professionals in reporting non-compliance with food labelling legislation. The British Dietetic Association (BDA) encourages its members to report misleading food information and advertising on social media and elsewhere, acknowledging that it is a dietitian's role to protect consumers from misleading nutrition information.¹⁹ The BDA provides an online form for dietitians to complete, which is then passed on to the Advertising Standards Authority in the United Kingdom to be assessed.¹⁹ A fifth (20%) of dietitians feel that ADSA, South African dietitians' professional body, should be involved in the reporting process; however, this is not part of the reporting procedure. It is perhaps a recommendation for ADSA to take a more active role in the reporting process. Editorials by key role players in food labelling in South Africa have been published on the need for clear and effective food labelling for fear of being in contravention of R.146 but none have examined the barriers involved in keeping manufacturers accountable.^{20,21} Despite two draft food labelling regulations being published in the past 10 years (R.429 of 2014 and the recent R.3337 of 2023), no stipulated procedure for reporting non-compliance exists, nor is there detail of inspection procedures that are present in R.991.^{5,16} Barriers to manufacturers' compliance with food labelling regulations have been studied internationally in some detail, and include lack of financial resources (in the case of small-to-medium enterprises) and lack of access to information, support, interest and knowledge.²² Enablers in respect of reporting non-compliance identified by dietitians and key role players are similar to those reported by Clarke et al.,¹⁵ specifically having enhanced training on the regulations, and the DoH DFC facilitating better awareness of the regulations.¹² Training on the regulations and input from the DoH DFC is a common enabler for dietitians when considering reporting non-compliance with R.991 and R.146, respectively.

Conversely, dietitians who have reported non-compliance noted feeling knowledgeable about where and how to report as significant enablers in their reporting process. Unfortunately, based on the answers provided, it was clear that the dietitians were misinformed regarding the correct process and entity to which to make reports. Dietitians stated that published guidelines from the DoH DFC on how to report non-compliance with R.146 would enhance reporting practices. Key role players also said that they felt dietitians were not familiar with R.146 and therefore this is a barrier to their reporting of non-compliance. Key role players experience the process of reporting non-compliance as less confusing, as they have knowledge of the regulations, have contacts within the appropriate departments and are aware of the information needed to report non-compliance. They clarified that reports of non-compliance must be addressed to the EHP in the local municipality where a food product is manufactured, rather than contacting any other entity or stakeholder. Key role players found that a lack of familiarity with the applicable regulations (R.146), lack of awareness of the appropriate stakeholders, limited human resources in the form of EHPs, poor leadership in the DoH DFC, no stipulations within R.146 on the reporting procedure and the advisory nature of the DoH DFC were major barriers in reporting non-compliance. It was found that the key role players were able to recommend a reporting procedure for dietitians and other members of the public, with recommendations for improving the reporting system in the future. The key role players explained the reporting process as something they have had

to 'figure out' via trial and error, and it was clear that there is no known published guidance, as confirmed by the participant from the DoH DFC. The procedure is somewhat similar to that of the reporting procedure for R.991, with the exception that there is no reporting tool/form. According to the key role players, the correct manner in which to report a misleading food label is to take a photograph of it and enclose a short report on how the label is in contravention of the regulations; this information should be sent to an EHP at the municipality in proximity to the manufacturer's address as stated on the food label. Reports of non-compliance should not be sent to the DoH DFC or to any other regulating or statutory body, as the DoH DFC has delegated responsibility for the enforcement of its Acts to the municipal rather than national level.²³ This division in responsibility may be a limiting factor in the enforcement of the regulations. In comparison, in the Republic of Ireland food labelling transgressions may be reported by consumers or by industry by completing an online form on the Food Safety Authority of Ireland website.²⁴ This is accessible and user-friendly.

The perception of poor enforcement of regulations was held by both dietitians and key role players, and this was suggested at least in part to be due to the fragmented nature of the food-control system in South Africa and the lack of EHPs. This was supported by a recent press release indicating that there is a shortfall of 4 293 EHPs in SA.²⁵ Indubitably, an increase in the workforce of EHPs in South Africa should lead to better enforcement of food labelling regulations.

It was established that there is no published guidance from the DoH DFC on how to report non-compliance with R.146 (the current legislation), and R.3337 (the current draft legislation) of 2023 but guidance does exist for R.991. The DoH DFC has issued guidance to enforcement officers, the public and healthcare practitioners on how to interpret R.991.²⁶ Similarly a guideline exists for manufacturers to comply with R.146, but there is no mention of enforcement of the regulation.²⁷

Our findings suggest that a statement from the DoH DFC on how to report non-compliance with R.146 (and future labelling legislation) would improve the reporting practices of dietitians. Dietitians need more education on the regulations, and this brings with it an opportunity for the DoH to offer training as continuing professional development to dietitians and key role players in the food industry. Being well-versed in food labelling legislation also brings opportunities for dietitians to expand their skill sets and career opportunities.²⁸

Conclusion, limitations and recommendations

The study findings suggest that dietitians perceive themselves as having a role in reporting food labelling transgressions in South Africa, although the extent of their involvement remains unknown. Overall, dietitians perceive their training on food labelling regulations as inadequate, and addressing this could potentially enhance their reporting practices in future. The key role players have provided clarification on the processes in reporting food labelling non-compliance. A low response rate may have limited the findings of this research, though this is not unusual for online surveys with healthcare professionals as it has been found that online surveys may have response rates as low as 3.4%.²⁹

Food labelling, regarded as a 'best buy' for combating the global increase in NCDs, has been advocated by the WHO as

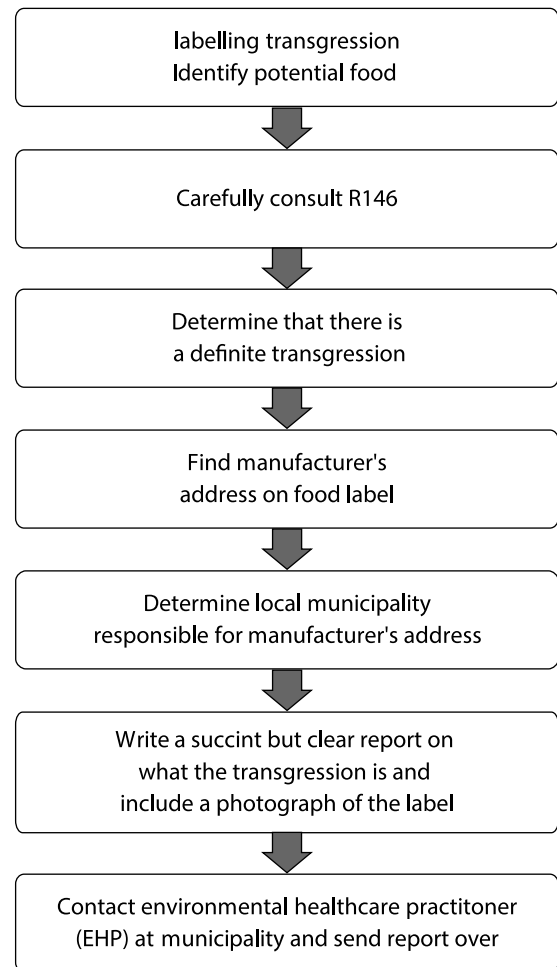


Figure 5: Suggested framework for reporting food-labelling transgressions.

a cost-effective strategy to promote public health.² For food labelling to be truly considered a best buy in preventing obesity and NCD, it is imperative that non-compliance with food labelling regulations be effectively reported, and that effective action is taken to enforce the legislation. Enforcement lies with environmental health practitioners, and effective enforcement may require a variety of actions by the food manufacturer, such as re-labelling and reformulation of food products. To facilitate the reporting of food labelling transgressions, a novel framework, as illustrated in Figure 5, could be adopted by dietitians, key role players in the food industry and even the general public. As indicated in Figure 5, reports of non-compliance with R.146 must be made in writing to the environmental health practitioner working in the municipality where the food product is manufactured, once the reporter has consulted R.146 carefully to determine that there is a food labelling transgression present.

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References

1. Department of Health. National strategic plan for the prevention and control of NCDs 2022–2027 [Internet]. 2022. Available from: <https://www.sancda.org.za/wp-content/uploads/2022/05/NCDs-NSP-SA-2022-2027.pdf>.

2. World Health Organization. "Best buys" and other recommended interventions for the prevention and control of noncommunicable diseases [Internet]. 2017. Available from: <http://apps.who.int/iris/bitstream/10665/259232/1/WHO-NMH-NVI-17.9-eng.pdf?ua=1>.
3. Department of Health. R146: Regulations relating to the labelling and advertising of foodstuffs [Internet]. 2010. Available from: https://www.gov.za/sites/default/files/gcis_document/201409/32975146.pdf.
4. Koen N, Wentzel-Viljoen E, Nel D, et al. Consumer knowledge and use of food and nutrition labelling in South Africa: A cross-sectional descriptive study. *Int J Consum Stud*. 2018;42:335–46. <https://doi.org/10.1111/ijcs.12422>
5. Department of Health. R3337: Regulations relating to the labelling and advertising of foodstuffs [Internet]. 2023. Available from: https://www.gov.za/sites/default/files/gcis_document/202304/48460rg11575gon3337.pdf.
6. Motadi S, Phalannndwa T, Masia TA, et al. Food labels of different food manufacturers in South Africa: Are they complying with health regulations? *African Journal for Physical Health Education, Recreation and Dance*. 2015;21(Suppl. 2):291–302.
7. Todd M, Guetterman T, Sigge G, et al. Multi-stakeholder perspectives on food labeling and health claims: qualitative insights from South Africa. *Appetite*. 2021;167:105606. <https://doi.org/10.1016/j.appet.2021.105606>
8. Soon JM, Abdul Wahab IR. Global food recalls and alerts associated with labelling errors and its contributory factors. *Trends Food Sci Technol*. 2021;118(Part B):791–8. <https://doi.org/10.1016/j.tifs.2021.11.001>
9. Van der Merwe D, Bosman M, Ellis S. Consumers' opinions and use of food labels: results from an urban–rural hybrid area in South Africa. *Food Res Int*. 2014;63(Part A):100–7. <https://doi.org/10.1016/j.foodres.2014.03.032>
10. Ajaero CK, Wet-Billings D, Atama N, et al. The prevalence and contextual correlates of non-communicable diseases among inter-provincial migrants and non-migrants in South Africa. *BMC Public Health*. 2021;21(1):999. <https://doi.org/10.1186/s12889-021-11044-9>
11. British Dietetic Association. What do dietitians do? [Internet]. 2021 [cited 2021 Mar 17]. Available from: <https://www.bda.uk.com/about-dietetics/what-do-dietitians-do.html>.
12. Wellman N, Tröster C, Grimes M, et al. Publishing multimethod research in AMJ: a review and best-practice recommendations. *Acad Manage J*. 2004;66(4):1007–15. <https://doi.org/10.5465/amj.2023.4004>
13. Lidgard D, Yeatman H. Dietitians' knowledge and perceptions of changes to food labelling in Australia. *Nutr Diet*. 2002;59(3):181–6.
14. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol*. 2006;3(2):77–101. <https://doi.org/10.1191/1478088706qp0630a>
15. Clarke M, Koen N, Du Plessis L. Perspectives from South African dietitians on infant and young child feeding regulations. *Public Health Nutr*. 2021;24(1):169–81. <https://doi.org/10.1017/S1368980020000233>
16. Department of Health. Regulation R991: regulations relating to foodstuffs for infants and children. *Government Gazette*. 2012;35941. Available from: https://www.gov.za/sites/default/files/gcis_document/201409/35941rg9868gon991.pdf.
17. Department of Paediatrics and Child Health, University of Cape Town. Protect, support and promote breastfeeding: eliminating conflict of interest [Internet]. 2022 [cited 2022 July 10]. Available from: <http://www.paediatrics.uct.ac.za/child-health-advocacy/breastfeeding>.
18. Bosman MJC, Van der Merwe D, Ellis SM, et al. South African adult metropolitan consumers' opinions and use of health information on food labels. *Br Food J*. 2014;116(1):30–43. <https://doi.org/10.1108/BFJ-12-2011-0298>
19. British Dietetic Association. Ads and fads – Combating nutrition misinformation online [Internet]. British dietetic association. 2022 [cited 2022 Nov 15]. Available from: <https://www.bda.uk.com/news-campaigns/campaigns/campaign-topics/ads-and-fads.html>.
20. Deosaran S. Regulation without enforcement is like a lion without teeth [Internet]. LinkedIn Pulse. 2015. Available from: <https://www.linkedin.com/pulse/regulation-without-enforcement-like-lion-teeth-sanjeen-deosaran/>.
21. Luterek J. Why non-compliance is not an option. *SA Food Rev*. 2021;48(1):35.
22. Yapp C, Fairman R. Factors affecting food safety compliance within small and medium-sized enterprises: implications for regulatory and enforcement strategies. *Food Control*. 2006;17(1):42–51. <https://doi.org/10.1016/j.foodcont.2004.08.007>
23. Chanda RR, Fincham RJ, Venter P. A review of the South African food control system: challenges of fragmentation. *Food Control*. 2010;21(6):816–24. <https://doi.org/10.1016/j.foodcont.2009.12.004>
24. Opperman G. Shortage of environmental health practitioners in South Africa [Internet]. Democratic Alliance News. 2022 Mar 7 [cited 2022 Oct 11]. Available from: <https://www.da.org.za/2022/03/shortage-of-environmental-health-practitioners-in-south-africa>.
25. Food Safety Authority of Ireland. Make a complaint [Internet]. 2023 [cited 2023, October 16]. Available from: <https://www.fsai.ie/contact/make-a-complaint>.
26. Ntsie PR. The position of the national department of health regarding interpretation of violations of the regulations relating to foodstuffs for infants and young children (R991). *S Afr Med J*. 2020;110(4):265. <https://doi.org/10.7196/SAMJ.2020.v110i4.14698>
27. Department of Health. Guidelines applicable to the regulations relating the labelling and advertising of foodstuffs (R146 Of 1 March 2010), for compliance purposes table [Internet]. 2011 [cited 2020 May 23]. pp. 1–46. Available from: <http://www.health.gov.za/index.php/shortcodes/2015-03-29-10-42-47/2015-04-30-09-10-23/2015-04-30-09-11-35/category/207-regulations-labelling-and-advertising?download=746:guidelines-relating-to-the-labelling-and-advertising-of-foodstuffs-applicable-to-r146>.
28. Peregrin T. Next on the menu: labeling law could mean new career opportunities for RDs. *J Am Diet Assoc*. 2011;111(Suppl. 5):S12–S14. <https://doi.org/10.1016/j.jada.2011.03.002>
29. L'Ecuyer KM, Subramaniam DS, Swope C, et al. An integrative review of response rates in nursing research utilizing online surveys. *Nurs Res*. 2023;72(6):471–80. <https://doi.org/10.1097/NNR.0000000000000690>