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SHORT COMMUNICATION

Insight into the complexities of human nutrition and holistic health: the value of qualitative descriptive research

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South Africa's nutrition transition, driven by a complex interplay of socio-ecological factors, has led to rapidly rising rates of overweight, obesity and non-communicable diseases. While quantitative methods offer important insights, they cannot fully capture these multifaceted issues. Qualitative descriptive research, rooted in naturalistic inquiry, provides both exploratory and explanatory value with procedural simplicity in illuminating the complexities of human nutrition and holistic health in South Africa, guiding the development of more effective and culturally sensitive interventions and policies. Recommendations are offered for future research using qualitative descriptive methods to enhance our understanding of the nutrition transition and its broader health implications.

Keywords health promotion, healthy lifestyle, qualitative research, research design

South Africa is experiencing a nutrition transition linked to economic growth and rural–urban migration and is characterised by changes in health lifestyles, such as dietary and physical activity patterns.[1] These changes are associated with a triple burden of malnutrition: undernutrition, micronutrient deficiencies and, most notably, a higher prevalence of adult overweight, obesity and non-communicable diseases (NCDs),[2] resulting in a substantial economic burden on the South African healthcare system.[3] Consequently, the prevention of obesity and NCDs has become an important health research priority.[4,5]

A complex set of interacting drivers underlie the nutrition transition in South Africa. These include individual and group-level behavioural, social, economic, cultural and psychological factors.[6] For example, the obesogenic food environment, characterised by an abundance of ultra-processed food that is cheap and nutrient-poor, has been identified as a key challenge to attaining a healthy lifestyle.[7] However, in South Africa obesity is both a consequence of changes in health lifestyles and a driver of these changes. This is due to strong positive social and cultural associations of a fuller figure with affluence, health and beauty, a fuller figure serving as a symbolic distinction from illnesses such as HIV/AIDS that are, from a social and cultural perspective, strongly associated with slimmer figures.[8–10]

In terms of identifying and understanding this complex problem, quantitative methods have provided important systematic and measurable insights into the patterns of health and disease, associations of health-related behaviours and, recently, the food environment. Quantitative methods align with a positivist paradigm, which assumes that reality can be known through precise observation and verifiable measurement. It is characterised by objectivity and is considered to be value-free.[11]

In the context of health lifestyles research, however, quantitative methods cannot adequately capture the multifaceted nature of complex issues, which includes contextual influences, social determinants, such as social and cultural norms and influences, subjective experiences, perceptions and emergent issues. Therefore, a complementary approach that draws heavily from qualitative and co-creative research methodologies is essential to gain a more holistic perspective.[12] Qualitative methods align with an interpretivist paradigm, which assumes that reality is socially constructed and has multiple perspectives. In this paradigm, knowledge is considered to be subjective, context-dependent and influenced by values.[11]

Qualitative descriptive research

A qualitative research approach with great potential to help the researcher make sense of the complex health lifestyle landscape is qualitative description. It is a straightforward research design aimed at exploring, understanding and explaining the complexities of real-world settings, without the need for high-level interpretation.[13,14] It is theoretically rooted in naturalistic inquiry,[15] the principles of which relate directly to the applicability of qualitative description in researching multidimensional nutrition and health lifestyle issues (Table 1).[15]

Thus, qualitative description is a valuable approach to explore and understand South Africa's broad nutrition landscape including undernutrition, nutrition literacy, food practices, food choice and adherence to recommendations and treatment. In the context of the country's rising obesity and NCD levels, qualitative description can be particularly valuable to inform the design and implementation of lifestyle interventions, as described below.

Exploratory value

Qualitative descriptive methods offer researchers the opportunity to delve deep into the experiences, feelings, perceptions, attitudes, beliefs and behaviours of individuals. Consequently, researchers may gain a more complete and nuanced understanding of complex behavioural patterns, nutrition status,

Table 1: Principles of naturalistic inquiry

- There is no single reality, rather there are multiple and socially constructed realities that are interrelated and need to be studied holistically
- Human behaviour is context- and time-bound and any study thereof will produce bounded knowledge, thus necessitating the rich description of context
- Action is shaped by, is part of and can only be explained in terms of patterns of multiple interacting factors, events and processes, again requiring a holistic view of the real-world context of the action
- Subjectivity is inherent to the researcher–participant relationship and is essential for respectful, reciprocal learning
- Research is value-bounded in terms of the researcher's own values, paradigm, choice of substantive theory, context and the interaction among these

Source: Lincoln and Guba (1985) .[15]

physical activity, and health-seeking habits and the underlying barriers and facilitators to these.[16,17]

One example of an underlying barrier to adopting a healthier lifestyle for weight loss in South Africa is the influence of social norms and cultural beliefs on weight perception and body image.[8–10] Such beliefs and norms may strongly influence an individual or group's risk perception and consequent adherence to healthy lifestyle behaviours as highlighted by two recent qualitative descriptive studies.[18,19] These studies captured varying preferences for larger body sizes among men and women, depending on the respondent's own body size perception. Furthermore, participants had a misperception of what constitutes normal weight, overweight and obesity. This points to an underestimation of the health risk associated with overweight and obesity, a potential barrier to adopting a healthy lifestyle.

Two other studies similarly explored perceptions of and barriers to adopting a healthy lifestyle, specifically among health workers and nurses.[20,21] Interestingly, although the participants were aware of the health risks associated with obesity, neither study found this knowledge to be a sufficient motivator to change their health behaviour. Further, the study among nurses[21] confirmed the overriding influence of social and cultural norms and beliefs concerning body size as a barrier to adopting a healthy lifestyle despite a greater awareness of the health risks associated with obesity among this relatively educated population. As such, qualitative descriptive methods are particularly useful when exploring topics that are not well understood or have not been studied extensively in the past.[13]

Explanatory value

Qualitative descriptive methods are valuable in that they provide the researcher with the opportunity to gather and present context-specific information regarding the real-world setting – the social, cultural, economic, structural, geographical, political, temporal dimensions – that influence nutrition behaviour and status.[17] This contextual information helps the researcher understand why or how certain patterns or behaviours occur and is crucial when developing or translating interventions aimed at guiding individual health decisions and community-wide health promotion initiatives by recognising the influence of both surface structures (e.g. language, food practices) and deep structures (e.g. cultural, social, environmental, historical and psychological factors).[22]

For example, a study exploring the dietary and physical activity practices of female adolescents in Soweto highlighted the importance of community as well as social and financial considerations in food choice at home and at school.[23] Another important aspect was the *knowledge–behaviour gap*; participants were aware of the health risks associated with less healthy food choices, but this awareness rarely translated into making healthier food choices. Another study explored the perceptions of, as well as the facilitators and barriers to, buying and consuming healthy food among female caregivers in Soweto.[24] This study found that caregivers' motivations for buying and consuming healthy food, particularly for children, were rooted in both practical considerations such as limiting healthcare costs related to children falling ill and long-term health considerations such as preventing chronic disease that they or a close relative experienced.

These studies highlight the explanatory value of qualitative descriptive research in understanding the nuanced interplay of knowledge, resources, societal and personal factors in shaping dietary practices and the complexity of adopting healthier diets. This knowledge could support the formulation and implementation of interventions that are better adapted to particular social and cultural contexts.[16,17,25]

Procedural simplicity

Qualitative descriptive methods are valuable for their relative procedural simplicity. As seen from the foregoing, this design lends itself well to generating rich, narrative-based, context-specific data. It primarily employs a 'factist' view of data using relatively straightforward data analysis techniques, such as qualitative content analysis (QCA) and thematic analysis (TA).[13] Through these techniques, textual or visual data are systematically coded to identify, analyse and report patterns and themes.[26] A main difference between QCA and TA lies in how the significance of themes is derived, with QCA offering the possibility of quantification of data through frequency counts of categories and themes.[26]

QCA and TA are considered minimal inference data analysis techniques because they require relatively lower levels of data interpretation than other qualitative research methods.[13] For example, data analysis for phenomenology and grounded theory follows prescribed processes and higher levels of interpretation to uncover the deeper meanings of the data, the aim of phenomenology being to understand the essence of a lived experience from the participants' perspective and the aim of grounded theory being to construct theories that explain the underlying social processes observed in the research context.[27]

On the other hand, QCA and TA in qualitative descriptive studies describe participants' concerns or perceptions without transforming these into theoretical constructs or narrative representations.[13] In the South African context this is especially important, as the primary language of participants is often different from the language in which the study is conducted. Thus, contextual meanings cannot easily be translated using highly abstract terms.[25]

Minimal inference techniques facilitate agreement among researchers, yet do not absolve the researcher from their responsibility to rigorously analyse and interpret the data.[13,14] The researcher should aim to achieve both *descriptive validity* (agreement on the facts) and *interpretive validity* (agreement on the meaning attributed to the facts) rather than just presenting arbitrary and uninterpreted quotations.[14] Taken together, a

qualitative descriptive research design is considered rather pragmatic due to its comparative procedural simplicity, yielding rich data from a small sample size in a relatively short time frame.

Limitations of qualitative descriptive methods

Notwithstanding the inherent attributes of qualitative descriptive methods as just described, these are not without limitations. As we consider two such limitations, bear in mind the principles of naturalistic inquiry on which these methods are based (Table 1).

First, findings may not be generalisable to larger populations. Although qualitative descriptive methods provide rich, detailed data, these are also context- and time-bound. Due to this context-specific focus, generalisability is usually not the intent of qualitative methods. Therefore, it may be useful to outline the contextual parameters in which the findings are, or are not, particularly relevant.[28]

Second, qualitative descriptive methods may be perceived as being unsystematic. This may be because they do not require pre-existing theoretical and philosophical commitments and allow an 'eclectic but reasonable combination of sampling, and data collection, analysis, and re-presentation techniques'.[13] As such, particular attention to rigour is important.

Recommendations

Having presented the value and limitations of qualitative description for health lifestyle researchers, it is essential to highlight the importance of rigour in applying this method. We offer three recommendations to support the rigour of qualitative descriptive studies.

The first recommendation is to choose, apply, describe, and reference a quality framework and strategies used to maintain rigour in the study. If the chosen quality framework is modified (e.g. some strategies are not used or other strategies are included), the rationale for doing so should be explained. Not only will this help in the design of the study, but it will also lend credibility to the chosen design and findings.

To help maintain rigour, qualitative researchers may draw on one of several useful quality frameworks or models[29] such as the trustworthiness model,[30] Creswell's[31] qualitative validity and reliability framework or Tracy's[32] 'big-tent' criteria. The trustworthiness model is particularly synergistic to naturalistic inquiry and comprises strategies to uphold its five standards (Table 2).[30] Two 'equator tools', i.e. the Consolidated Criteria for Reporting Qualitative Research (COREQ)[33] or Standards for Reporting Qualitative Research (SRQR),[34] may serve as useful checklists in all phases of the research process.

The second recommendation relates to three fundamental and interrelated research considerations.

Consideration One: ensure there is *methodological congruence* or *fit* among the research problem, research question, method and data.[35] Strong methodological alignment will support the conclusions drawn from the data, as well as the justification for these conclusions, and ultimately enhance the trustworthiness of the study. To achieve this alignment, it is important to define the research purpose, as this will guide the researcher in the development of sound research questions, choice of appropriate research method, data collection and analysis techniques.[36] The Emphasis-Purposeful Sample-Phenomenon of interest-Context (EPPiC) framework is a useful tool for composing structured overarching research questions.[17]

Table 2: The trustworthiness model for rigour in qualitative research

Standards	Criterion	Strategies
Truth value	Credibility: To what degree does the research accurately represent the participants' experiences and viewpoints?	Prolonged engagement: Persistent observation Triangulation of data & sources Member checking Reflexivity Negative case analysis
Applicability	Transferability: To what extent can the research findings be applied to other contexts or groups?	Thick descriptive data
Consistency	Dependability: How stable are the research findings over time and conditions, and is the process logical, traceable, and documented?	Audit trail: External audit
Neutrality	Confirmability: To what degree are the research findings shaped by the respondents rather than researcher bias, motivations, or interests?	Audit trail: External audit
Authenticity	Fairness: To what extent does the research fairly represent different viewpoints and convey the complexity of the studied context?	Participant empowerment: Determine and present underlying value-systems Negotiate recommendations based on the findings with stakeholders

Source: Lincoln and Guba (1986).[30]

Consideration Two: correctly distinguish the *qualitative research method* (e.g. qualitative description, grounded theory or phenomenology) from a *data collection technique* (e.g. semi-structured or open-ended individual or focus-group interviews).[13,14] This point leads to the third consideration.

Consideration Three: get the name right. If the study design does not clearly meet the pre-defined design criteria of the more 'well-known' qualitative methods, it may just be a qualitative descriptive study. For example, although many studies in fact have a qualitative descriptive design, they are named otherwise.[8,20,24,37,38] Clearly categorising the study as qualitative description will not only lend credibility to the chosen design and techniques but will also help the reader to make constructive judgements and conclusions concerning the study.

The third recommendation reminds researchers that the chosen method as well as data collection and analysis techniques should be appropriately and completely applied. Many of the qualitative descriptive studies from South Africa reviewed for this editorial used thematic analysis to analyse the interview transcripts. However, Sandelowski[13,14] emphasises the importance of descriptive statistical analysis to provide a nuanced understanding of the patterns observed in the data. Therefore, researchers choosing qualitative description may consider using content analysis techniques. QCA uses quantification of the qualitative data (i.e. frequency counts) to show patterns

(manifest content), which can help to develop themes or to confirm themes (latent content).[13] For example, if a theme identified from the comments of several participants is compared with a single comment from one participant, it may indicate a relative saliency of one theme over another for a particular sample of the population. This has important implications for the conclusions that can be drawn from the findings.

Conclusion

This short communication has aimed to highlight the value of qualitative description in capturing a more nuanced and in-depth understanding of South Africa's complex nutrition landscape and the cultural, environmental and social factors that influence the design, implementation and evaluation of health lifestyle interventions. By providing rich and detailed insights that explore and explain participants' experiences and perspectives, qualitative description can inform the development of more effective and culturally sensitive interventions and policies that are tailored to meet the needs and preferences of South Africa's diverse population.

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References

1. Pisa PT, Pisa NM. Economic growth and obesity in South African adults: an ecological analysis between 1994 and 2014. Eur J Public Health. 2017;27:404–9. https://doi.org/10.1093/eurpub/ckw119
2. Food and Agriculture Organization, European Union, French Agricultural Research Centre for International Development, DSI-NRF Centre of Excellence in Food Security. Food Systems Profile - South Africa [Internet]. FAO; European Union ; CIRAD; 2022 [cited 2024 Nov 21]. Available from: http://www.fao.org/documents/card/en/c/cc0071en
3. Boachie MK, Thsehla E, Immurana M, et al. Estimating the healthcare cost of overweight and obesity in South Africa. Glob Health Action. 2022;15:2045092. https://doi.org/10.1080/16549716.2022.2045092
4. National Department of Health. Revised 2021-2024 national health research priorities for South Africa [Internet]. Pretoria, South Africa: National Department of Health; 2023. p. 18. Available from: https://www.health.gov.za/wp-content/uploads/2023/06/Revised-National-Health-Research-Priorities-2021-2024.pdf.
5. Laar AK, Addo P, Aryeetey R, et al. Perspective: food environment research priorities for Africa—lessons from the Africa food environment research network. Adv Nutr. 2022;13:739–47. https://doi.org/10.1093/advances/nmac019
6. Scott V, Schaay N, Schneider H, et al. Addressing social determinants of health in South Africa: the journey continues. In: Padarath A, Barron P, editor. South Afr Health Rev. Vol. 2017. Durban: Health Systems Trust; 2017. p. 77–88.
7. Kroll F, Swart EC, Annan RA, et al. Mapping obesogenic food environments in South Africa and Ghana: correlations and contradictions. Sustainability. 2019;11:3924. https://doi.org/10.3390/su11143924
8. Bosire EN, Cohen E, Erzse A, et al. 'I'd say I'm fat, I'm not obese': obesity normalisation in urban-poor South Africa. Public Health Nutr. 2020;23:1515–26. https://doi.org/10.1017/S1368980019004440
9. Draper CE, Davidowitz KJ, Goedecke JH. Perceptions relating to body size, weight loss and weight-loss interventions in black South African women: A qualitative study. Public Health Nutr. 2015;19:548–56. https://doi.org/10.1017/S1368980015001688
10. Puoane T, Fourie JM, Shapiro M, et al. 'Big is beautiful' – an exploration with urban black community health workers in a South African township. South Afr J Clin Nutr. 2005;18:6–15. https://doi.org/10.1080/16070658.2005.11734033
11. Chilisa B. Indigenous research methodologies. Thousand Oaks (CA): SAGE; 2020. p. xxiv, 368 pages.
12. Rutter H, Savona N, Glonti K, et al. The need for a complex systems model of evidence for public health. Lancet. 2017;390:2602–4. https://doi.org/10.1016/S0140-6736(17)31267-9
13. Sandelowski M. Whatever happened to qualitative description? Res Nurs Health. 2000;23:334–40. https://doi.org/10.1002/1098-240X(200008)23:4 <334::AID-NUR9 > 3.0.CO;2-G.
14. Sandelowski M. What's in a name? qualitative description revisited. Res Nurs Health. 2010;33:77–84. https://doi.org/10.1002/nur.20362
15. Lincoln YS, Guba EG. Naturalistic inquiry. Newbury Park (CA): SAGE; 1985.
16. Bradshaw C, Atkinson S, Doody O. Employing a qualitative description approach in health care research. Glob Qual Nurs Res. 2017;4:1–8. https://doi.org/10.1177/2333393617742282
17. Moisey LL, Campbell K A, Whitmore C, et al. Advancing qualitative health research approaches in applied nutrition research. J Hum Nutr Diet. 2022;35:376–87. https://doi.org/10.1111/jhn.12989
18. Manafe M, Chelule PK, Madiba S. The perception of overweight and obesity among South African adults: implications for intervention strategies. Int J Environ Res Public Health. 2022;19:1–10. https://doi.org/10.3390/ijerph191912335
19. Okop KJ, Mukumbang FC, Mathole T, et al. Perceptions of body size, obesity threat and the willingness to lose weight among black South African adults: A qualitative study. BMC Public Health. 2016;16:1–13. https://doi.org/10.1186/s12889-016-3028-7
20. Phiri LP, Draper CE, Lambert EV, et al. Nurses' lifestyle behaviours, health priorities and barriers to living a healthy lifestyle: A qualitative descriptive study. BMC Nurs. 2014;13:38. https://doi.org/10.1186/s12912-014-0038-6
21. Simfukwe P, Van Wyk B, Swart C. Perceptions, attitudes and challenges about obesity and adopting a healthy lifestyle among health workers in Pietermaritzburg, KwaZulu-Natal province. Afr J Prim Health Care Fam Med. 2017;9:1–9. https://doi.org/10.4102/phcfm.v9i1.1276
22. American Association of Diabetes Educators. Cultural sensitivity and diabetes education. Diabetes Educ. 2012;38:137–41. https://doi.org/10.1177/0145721711431928
23. Sedibe MH, Feeley AB, Griffiths PL, et al. Narratives of urban female adolescents in South Africa: dietary and physical activity practices in an obesogenic environment. South Afr J Clin Nutr. 2014;27:114–9. https://doi.org/10.10520/EJC159091
24. Besselink D, Brandt H, Klingberg S, et al. Perceptions of healthy food, and perceived facilitators and barriers to buying and consuming healthy food, among female caregivers in Soweto, South Africa. South Afr J Child Health. 2022;16:172–7. https://doi.org/10.7196/SAJCH.2022.v16i3.1883
25. Sullivan-Bolyai S, Bova C, Harper D. Developing and refining interventions in persons with health disparities: the use of qualitative description. Nurs Outlook. 2005;53:127–33. https://doi.org/10.1016/j.outlook.2005.03.005
26. Vaismoradi M, Turunen H, Bondas T. Content analysis and thematic analysis: implications for conducting a qualitative descriptive study. Nurs Health Sci. 2013;15:398–405. https://doi.org/10.1111/nhs.12048
27. Starks H, Brown Trinidad S. Choose your method: a comparison of phenomenology, discourse analysis, and grounded theory. Qual Health Res. 2007;17:1372–80. https://doi.org/10.1177/1049732307307031
28. Tracy SJ. Qualitative research methods. Chichester: Wiley-Blackwell; 2013.
29. Greeff M. Qualitative research. In: Botma Y, Greeff M, Makhado L, Mulaudzi FM, editor. Res health Sci. 2nd ed. Cape Town: Pearson South Africa (Pty) Ltd; 2022 [cited 2024 Jan 24]. p. 231–99.
30. Lincoln YS, Guba EG. But is it rigorous? trustworthiness and authenticity in naturalistic evaluation. New Dir Program Eval. 1986;1986:73.
31. Creswell JW. Qualitative inquiry and research design: choosing among five approaches. 3rd ed Los Angeles: SAGE Publications; 2013.
32. Tracy SJ. Qualitative quality: eight 'big-tent' criteria for excellent qualitative research. Qual Inq. 2010;16:837–51. https://doi.org/10.1177/1077800410383121

33. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. Int J Qual Health Care. 2007;19:349–57. https://doi.org/10.1093/intqhc/mzm042
34. O'Brien BC, Harris IB, Beckman TJ, et al. Standards for reporting qualitative research: a synthesis of recommendations. Acad Med. 2014;89:1245–51. https://doi.org/10.1097/ACM.0000000000000388
35. Richards L, Morse JM. Readme first for a user's guide to qualitative methods. Thousand Oaks (CA): SAGE; 2013.
36. Mulaudzi FM. Initiation, formulation and conceptualisation of research. In: Botma Y, Greeff M, Makhado L, Mulaudzi FM, editor. Res health Sci 2nd ed. Cape Town: Pearson South Africa (Pty) Ltd; 2022 [cited 2024 Jan 24]. p. 30–72.
37. Phiri LP, Micklesfield LK, Mendham AE, et al. Perceptions and experiences of young Black South African women with obesity from a low socioeconomic community after following a 12-week structured exercise intervention. Front Sports Act Living. 2022;4:1–12. https://doi.org/10.3389/fspor.2022.813339
38. Pujol-Busquets Guillén G, Smith J, Larmuth K, et al. Exploring the perceptions of women from under-resourced South African communities about participating in a low-carbohydrate high-fat nutrition and health education program: a qualitative focus group study. Nutrients. 2020;12:894. https://doi.org/10.3390/nu12040894

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