Experiences and perceptions of nutritional health and wellbeing amongst food insecure women in Europe: A qualitative meta-ethnography

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ABSTRACT

Since the 2008 global financial crisis, there has been a rise in the number of people experiencing food insecurity. Particularly vulnerable are mothers with young children, pregnant women, and lone parents (the majority of whom are women). This systematic review and meta-ethnography of qualitative studies focused on women’s experiences of food insecurity and how it affects their nutritional health and wellbeing. Six electronic databases (Medline, Scopus, Web of Science, EMBASE, CINAHL and ASSIA), were searched from January 1, 2008-July 10, 2021, and supplemented by searches of grey literature databases, relevant websites, examination of reference lists and citation searches. We adhered to PRISMA and eMERGe guidelines to improve the completeness and clarity of meta-ethnographic reporting. Methodological quality of the studies was assessed using the Critical Appraisal Skills Programme qualitative checklist. We identified 11,589 unique records; we included 23 publications reporting data from 22 unique studies involving 647 women. Data were synthesised according to Noblit & Hare’s seven phases of meta-ethnography. We identified two key themes - accessing sufficient food and embodying food insecurity - comprising seven sub-themes. Our meta-ethnography provides a progressive ‘storyline’ of women’s experiences of food insecurity. This includes the ways in which women attempt to access sufficient food, are unable to meet their nutritional needs, and the ways in which this is embedded into their everyday lives and embodied in unhealthful physical, social, and mental nutritional health and wellbeing. It concludes that there needs to be greater recognition of the psychosocial impact of food insecurity on vulnerable women in addition to its impact on their nutritional health and wellbeing.

1. Introduction

1.1. Background

It is well established that a healthy balanced diet is an important factor for physical and mental health. There also exist established gender inequalities in health and wellbeing, whereby women live longer than men but with greater years in ill-health (Bambra et al., 2020). Health during working years is also lower for women and the health of mothers is a particular issue – not just for them but for their children. Women are unfavourably hit by socio-economic factors such as higher poverty, a history of lower education attainment, discrimination in the labour market and lower employment rates (Bambra et al., 2020). They are more likely to head lone parent households, to work part-time or be unemployed due to their caring responsibilities, or receive low-wage due to precarious employment contracts for the parts of the economy they work in (Bambra et al., 2020). These factors mean women are more likely to experience poverty (European Commission, 2019), a cause of food insecurity. Food insecurity is defined as ‘when people do not have adequate physical and economic access to sufficient, safe and nutritious foods that meet their dietary needs and preferences for an active and healthy life’ (Food and Agriculture Organisation of the United Nations, 1996). In the UK and Europe it has been an emerging major public health and social issue since the global financial crisis of 2008 since when more households have become food insecure (Loopstra et al., 2016). This review focussed on women of childbearing age as pre-conception maternal health is strongly linked to pregnancy outcomes, and it is also crucial for health across generations (Stephenson et al., 2018). This relationship tends to be articulated as the importance of nutrition during the first 1000 days of life (conception, pregnancy to two years of age) (Barker, 2007). Pregnancy is a period with additional nutritional demands on women so adequate nutrition is important for women’s health...
preconception, during pregnancy and in the postnatal period. Women are particularly vulnerable to food insecurity and need special consideration (Ivers and Cullen, 2011). Thus, understanding how food insecurity effects women’s nutritional health and wellbeing is important.

Food insecurity has important health impacts. Quantitative analyses demonstrate that individuals experiencing food insecurity are more likely to have a poorer quality diet than those who are food secure (Yang et al., 2018). Food insecurity is inversely associated with dietary quality for adults; consuming fewer vegetables, fruit, and dairy products than food secure adults and having lower intake of vitamins A, B-6, calcium, magnesium, iron and zinc (Hanson and Connor, 2014). There are substantial risks for maternal and child health associated with mothers living with overweight or obesity (Stephenson et al., 2018). Explanations for the relationship between food insecurity and nutrition-related health and wellbeing remain unclear. Proposed theoretical explanations include the substitution hypothesis whereby nutrient-dense, low-energy foods are substituted for cheaper, energy-dense often higher fat and sugar-containing foods (Drewnowski, 2004); as well as the insurance hypothesis associated with the cyclical nature of food insecurity and its disruption on metabolism (Nettle et al., 2017). Meanwhile, research has also begun to theorise the importance of emotional distress in the relationship between food insecurity and nutrition-related health outcomes, including weight status (Hemmingson, 2014, 2018).

There is an emerging body of qualitative research focusing on women’s experiences and perceptions of food insecurity in relation to their nutritional health and wellbeing. These studies report food insecure participants to have altered diets via restrictive eating patterns, for example, reducing portion size, skipping meals, or forgoing an entire day of food (Harvey, 2016; Puddephatt et al., 2020; Purdam et al., 2015). Other qualitative studies exploring the impact of food insecurity on nutritional health and wellbeing reported women had worsened health issues, such as stress, depression, and weight gain, which has a knock-on negative effect for the health and wellbeing of dependent children (Garthwaite et al., 2015; Harvey, 2016; Thompson et al., 2018). To date, most systematic reviews exploring the effects of food insecurity on nutrition have reviewed quantitative studies (Dinour et al., 2007; Hanson and Connor, 2014; Larson and Story, 2011; Myers et al., 2020). There is a gap in the literature for qualitative reviews on food insecurity focusing on high-income countries (HICs). This is despite evidence that food insecurity is a prevalent issue, raising major public health and social concerns (Davis and Geiger, 2017; Loopstra, 2020; Loopstra et al., 2016). There are several previous qualitative systematic reviews of relevance set within the wider context of poverty and deprivation (Attree, 2004, 2005, 2006a, b), albeit conducted prior to the 2008 global financial crash. Of particular importance is Attree’s 2005 review which explored the ways in which mothers coping strategies in poverty shaped the place of food in the household. Eleven UK-focused studies were synthesised using a meta-ethnographic approach. The review found three overarching concepts concerning low-income mothers’ management of poverty that exerted an influence on diet and nutrition. The first was ‘strategic adjustment’ which implies an element of choice in how resources are spent and strategically purchasing food or not along with other necessities. The second was ‘resigned adjustment’ in which mother’s strategic adjustments to food practices and eating patterns were now taken for granted as part of life. The third was ‘maternal sacrifice’ whereby mothers frequently prioritised children’s needs over theirs. However, since 2005, the social, political, and economic landscape has changed. All HICs saw increased poverty rates post the global financial crisis. In the UK, in 2013, a new benefit system, Universal Credit was introduced with adverse impacts on vulnerable claimants’ health and wellbeing (Cheetham et al., 2019). Most recently the COVID-19 pandemic has exacerbated food insecurity (Loopstra, 2020), which is expected to lead to higher poverty rates and profound effects on economically vulnerable families (International Labour Organisation, 2020). Indeed, poverty has fragmented into numerous types of poverty at a policy and academic level, including food poverty. Further, since 2010, food banks have become a prominent feature in the UK and European context and represent just one example of how coping strategies may have adapted.

Therefore, the aim of this qualitative systematic review and meta-ethnography was to explore and synthesise food insecure women’s experiences of their nutritional health and wellbeing in European countries, within the context of the last 12 years.

2. Methods

We conducted a systematic review and meta-ethnographic synthesis of primary qualitative studies. A full protocol for this review is published (Bell et al., 2021) and registered with PROSPERO (ID: CRD42020214159). The review is reported in line with PRISMA guidelines (see Appendix 1) (Page et al., 2021). As this is a meta-ethnography, we also adhered to eMERGe Reporting Guidance to improve the completeness and clarity of meta-ethnographic reporting (see Appendix 2) (France et al., 2019a).

2.1. Search strategy and screening

Searches of six electronic databases (Scopus, MEDLINE, EMBASE, CINAHL, Applied Social Science Index (ASSIA) and Web of Science) were conducted by ZB in March 2021 and updated in July 2021. These searches were supplemented by grey literature database searches using Trove, Open Access Theses and Dissertations (OATD) and OpenGrey Europe. Relevant stakeholder websites were also searched. Descriptive titles of qualitative studies can lead to inappropriate indexing, posing challenges in finding relevant studies when searching bibliographic databases alone (Atkins et al., 2008). Therefore, database searches were supplemented with examination of reference lists and citation searches. Search terms were informed by existing literature within the field and an information specialist from Newcastle University provided guidance with piloting and scoping searches. The strategy consisted of four main concepts in accordance with the PICOS tool (Taconelli, 2010). Search strategies for each database can be found in (see Appendix 3). Studies were imported into EndNote version X9.3.3 (EndNote, 2013) for de-duplication, then imported into Rayyan, an online program for systematic reviews (Institutue, 2020). All titles and abstracts were screened by ZB and a second independent reviewer (split between SS, SV and NH). Full texts were also double screened independently. Discrepancies were resolved with a third reviewer.

2.2. Study eligibility criteria

Studies were included if they were primary studies with a qualitative research design reporting food insecure women’s accounts and experiences of their nutritional health and wellbeing. Nutrition-related outcomes for women included: diet (e.g. quality and quantity of food, eating behaviour, eating pattern) and food practices (e.g. food acquisition, food preparation, organisation and storage of food in the house). Nutritional health and wellbeing outcomes for women spanned physical (e.g. perspectives on their weight) and mental (e.g. anxiety about household food running out) outcomes. Additional eligibility criteria were studies reporting data collected between 2008 and 2021 in an OECD HIC, and studies available in the English language. Studies restricted to a specific type of population not directly related to women or wider populations with clinical needs, that necessitate a specific diet (e.g. studies in the context of people living with HIV, type 1 diabetes etc.) were excluded. Studies exploring food insecure women’s health more broadly were also excluded unless the health effects were explicitly linked to nutrition, as were studies where quotes could not be attributed to gender or age. Study eligibility criteria was narrowed retrospectively to include only data collected in Europe due to the breadth of eligible studies originally retrieved. A strength of this narrowing is that it helps reduce heterogeneity in terms of food insecurity, social security and food aid between
countries so more meaningful conclusions can be drawn from included studies.

3. Data extraction and quality appraisal

Data were extracted using a standardised form that was piloted on an initial sub-set of studies and included: study design, location, participant characteristics, study period, sample size, methods of data collection and analysis, main findings, verbatim quotes and theoretical frameworks. Data were extracted by one reviewer (ZB) with a sample checked by a second reviewer (split between SS, SV, NH). This information forms the table of included studies (see Appendix 4). Quality of included studies was assessed using the Critical Appraisal Skills Programme (CASP) qualitative checklist (Singh, 2013). One reviewer (ZB) appraised all studies, with a sample of included studies independently double reviewed to check agreement (SS). Discussions amongst the two reviewers resolved any discrepancies. Quality appraisal was not used as part of exclusion criteria but instead to inform the data synthesis stage. It provided an overview of the quality of included studies for context and informed discussion of the strengths and limitations of existing evidence.

2.4. Translating and synthesising

Meta-ethnography places studies side-by-side to see how key themes can be translated between studies whilst considering similarities and differences across varied contexts (France et al., 2019b). Translation refers to a process of systematically comparing the meaning of themes and their relations across study accounts to identify the range of themes. This interpretive approach moves beyond describing or aggregating findings, instead aiming to ‘synthesize understanding’ (Noblit and Hare, 1988). The integration of findings from multiple studies conducted in different settings enabled our development of a deeper insight into understanding food insecurity in the context of nutritional health and wellbeing, something individual studies alone could not have provided. Meta-ethnographic synthesis was conducted in seven steps using NVivo 10 software (QSR International, 2020). Step one comprised in-depth reading of included studies by four authors independently (ZB, SS, SV, NH). Step two involved creation of study sub-sets, line-by-line coding and extracting of first and second order themes (ZB). At this stage, a sample of papers were duplicate-coded and discussed with the review team. The purpose of this was to view the data through different perspectives (i.e. a form of investigator triangulation) rather than to check for consistency in coding between reviewers, in a similar capacity to the process of pragmatic double-coding in empirical qualitative data analysis (Barbour and Barbour, 2003). Step three focused on determining how the studies were related using a tabular form of first order themes (interpretations) and second order themes (interpretation of interpretations) with grouped studies to create ‘meta-themes’. The fourth and fifth steps involved translating studies by checking first and second order concepts and themes against each other. Step six synthesised the translations to create a third order construct and step seven is the expression of the synthesis written up in this publication.

2.5. Public engagement

Review findings were sense-checked at a workshop involving seven participants with lived experience of food insecurity to explore the findings and how they resonate with lived reality (Birt et al., 2016). While this was not intended to be completely representative of all women with experience of food insecurity (Turk et al., 2017), this process helped to broaden our perspectives on the results and whether they reflected some of the lived experiences in this review. This took place after the synthesis of included studies and was used to inform our interpretation of the dataset as a whole as well as the implications of this work for further research, policy and practice set out in the discussion.

3. Findings

We identified 11,589 potentially eligible unique records through database searches, grey literature searches and stakeholder website searches, and an additional 122 from citation and reference searches. A total of 23 publications reporting data from 22 unique studies were included in the final review. Reasons for exclusion at the full-text stage are recorded and reported using a PRISMA flowchart, Fig. 1.

3.1. Characteristics of studies

Appendix 4 illustrates the characteristics of the 22 included studies, which represent 647 women, aged between 16 and 55 years. Study sample sizes ranged from 2 to 133 female participants Women were of a variety of ethnicities reported as White, European, Black Asian, Minority ethnic, Arabic, Indian, Anglo-Indian, Bangladeshi, Pakistani, Moroccan, Surinamese, Curacao and Polish. Seventeen studies were conducted in the UK, two in the Netherlands, one in Denmark, and one in the Republic of Ireland. One study included data from multiple countries (UK, Portugal, and Norway). Eight studies took place in a community setting (e.g., community centres or organisations, university or café); four within a foodbank setting; two in an undefined space convenient for the participant; four in the participants’ homes; and five study settings were not stated.

Eleven studies focused primarily on food insecurity. Five of these used foodbank access as a proxy measure of food insecurity; one used the 18-item United States Department of Agriculture, Household Food Security Survey Module (USDA, 2021); one adapted survey questions to identify those having financial difficulty in relation to food; and five used socio-economic status as a proxy measure for food insecurity. Eleven studies discussed food insecurity as a secondary focus in the context of wider research, for example with the primary focus being austerity or Healthy Start vouchers. Healthy start vouchers are a benefit-in-kind available for low-income pregnant women and families in the UK to provide cow’s milk, fresh fruit and vegetables, infant formula, fresh, dried, and tinned pulses, and free vitamin supplements (O’Connell and Brannen, 2021). None of these studies reported a specific measure of food insecurity. None of the studies with a primary focus on food insecurity discussed pregnant women, whereas two of the studies with a secondary focus on food insecurity discussed pregnant women within a wider sample. None of the studies focused solely on pregnant women.

3.2. Quality appraisal

Ten studies rated ‘high’ and ‘good’ quality, and one rated ‘low’ quality (see Appendix 5). Studies were strong in stating clear relevant research aims, using appropriate methodologies and research design. ‘Good’ and ‘low’ scoring studies consistently scored lower by not adequately discussing reflexivity or showing how, beyond a positive ethical approval, ethics had been considered. In addition, the study scoring ‘low’ was not clear on its recruitment strategy.

3.3. Synthesis

Noblit and Hare (1988) propose the notion of a ‘line of argument’, whereby from the synthesis a storyline unfolds through the development of key themes and sub-themes. The storyline is presented in the proceeding sections through two core themes: accessing sufficient food and embodying food insecurity. Within each core theme are several sub-themes that describe the concepts in detail: strategic food practices, accessing charitable food aid, informal support networks, Healthy Start vouchers, inability to meet own nutritional needs, maternal sacrifice and physical and mental health and wellbeing impacts. Table 1 details which key themes and sub-themes developed across included studies. Fig. 2 represents the storyline described through the themes and sub-themes,
3.4. Theme one: accessing sufficient food

The most common theme developed from the included studies related to the various ways women described trying to access sufficient food. This included sub-themes related to the strategic food practices women employ to cope with a low budget and access food in acceptable ways, the tension that arises between women and their relationship with charitable food aid, the role of (gendered) informal support networks used by some women to access food, and the role of Healthy Start vouchers as a 'nutritional safety net'.

3.5. Strategic adjustments

Food insecurity impacted women’s food practices, which in turn influenced their ability to use food to socially connect with others, as well as by impacting on their dietary variety, pattern, and quality. Across the studies women spoke explicitly about adopting various food practices to access sufficient food on their low budget. The first adaptation that women described in response to food insecurity was to stop eating out in order to increase their capacity to buy sufficient healthy food “we don’t go out to eat anymore … it is once in a lifetime, because otherwise it is not possible to make ends meet …” (Nielsen et al., 2015 p. 439). This lack of eating out was by necessity rather than choice and linked to a drop in quality of life. Quality of life was poorer in terms of enjoyment of food, family togetherness and social relations which eating out can harness. Similarly, Stack and Meredith (2018) found that lone mothers social eating was impacted. For lone mothers, the embarrassment of having little money had a negative impact on social connections. They tended to withdraw and isolate themselves. One mother talked of how her friends would occasionally decide to get a treat at the park, but she could not afford to, so due to embarrassment she withdrew herself and her child altogether “… they might get a treat or go for a coffee. And I just thought I don’t have three pounds to do that, so we’ll just stay at home and do things ourselves” (p.236). Purdam et al. (2015) found that instead of stopping all social eating, some mothers still invited friends with their children round to their home for dinner, but their guests “… brought the food to share with her” as “she could not afford to provide food for all of them” (p.1082). Indeed, other mothers spoke of being unable to enjoy regular family meals, or share meals on special occasions like birthdays and barbecues because of its unaffordability (MacLeod, 2018).

Across all studies women negotiated their food insecurity by

Fig. 1. PRISMA flowchart.
strategically employing food shopping strategies to enable them to continue to access food in socially acceptable ways. Such strategic practices were adopted within externally determined limitations, hence constraining their food choices. Thus, women reported feeling the impact of the economic recession and found it increasingly difficult to stretch their food budgets with rising food prices. Garthwaite et al. (2015) demonstrated that food shopping practices helped mothers get maximum food consumption with a minimum means. Mothers shopped around for cheaper or reduced items and would favour processed, ‘filling’ cheap alternatives, highlighting how managing diets with minimum means can directly influence nutritional health and wellbeing through poor dietary quality. Similarly, Harden and Dickson (2014) found that mothers with young children negotiated food insecurity by adopting specific food shopping practices to ensure that their limited resources stretched as far as possible. One woman remarked on the inanity of needing to apply these strategies to get enough food “… so you’re going to like 5 different shops to get, who’s got the best, sort of thing, it’s just ridiculous” (Halligan, 2019 p. 208). Strategically, shopping for food was a time-consuming process, requiring planning and money management (Jolly, 2018; Lucas et al., 2018; van der Velde et al., 2019)”I have a list of everything I need and where to get things from and then I just go to all the places and get everything” (Mort, 2017 p. 216). For migrant mothers, food shopping was even more precarious. Jolly (2018) (p. 104) described the importance of cost saving among migrant mothers “the frozen stuff is £1, and we’ll go to Aldi, and it’s 99p, and we’re still saving a penny”, and van der Velde et al., ((2019) p.7) described the embarrassment of buying cheaper brands “I used to be ashamed to buy cheap products […]. I really thought those people would think that I don’t have money”.

In turn, food insecurity influenced women’s food practices within the household. Nielsen et al. (2015) and Power et al. (2018) found that women and mothers on low incomes were aware of the need to fully utilise their food ‘to make ends meet’. This meant being able to efficiently make use of the food they were able to access, achieved by eating the same meals for several days and only buying limited ingredients to reduce food waste. This pressure on budgets forced compromises to dietary quality, and in turn limited enjoyment of food for women, “it is not that I have a problem eating the same dish two days in a row, but I would like things to be more varied” (Nielsen et al., 2015 p. 438). Recipes with long ingredient lists could be expensive, “… cause you need a pinch of this and a pinch of that … that’s why I end up having cheese on toast” (Spencer, 2015 p. 62). Women cooked from scratch, in bulk and made meals with the food available within the household which could mean cooking “not healthy stuff” but “just what I could get really” (Power et al., 2018 p. 2723). For asylum seekers, refugees and migrant women, chronic experience of food insecurity was evident throughout their accounts of how food practices were employed by necessity rather than by choice to save money and “make food last” as “essential for survival” (Jolly, 2018 p. 103). One woman compared food directly to money, arguing that not wasting food was an essential survival strategy for living on a very low, irregular income “… to put it in the bin, that’s like throwing money away” (Jolly, 2018 p.103).

Across the studies it was evident that food insecurity was about more than access to food. Accounts described issues linked to fuel poverty and the physical space in which to cook. Purdam et al. (2015 p. 1080) reported that for some women and mothers accessing foodbanks, only food heated using a microwave was eaten because the cost of using the cooker was too high, “I’ve got a cooker at home but use the microwave as it uses less electricity. All my money goes on gas and electricity”. This portrays poverty and its different aspects that women and mothers were constantly juggling. One woman explained how a constant negotiation between food and poverty impacted dietary quality “You used to be able to buy lots of fruit but it’s so expensive … I just get it when I can afford it …” (Purdam et al., 2015 p. 1081). Mothers would “take out of my mouth to put uniforms on my kids” (Dabrowski, 2017 p. 176). The struggle of ‘heating and eating’ surfaced in studies to varying degrees. Thus, women

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Table 1
Key themes and sub-themes emerging across included studies.

| Key themes | Sub-themes | Context |
|------------|------------|---------|
| Accessing sufficient food | Strategic food practices | • 11 UK, 1 ROI*, 1 Denmark, 1 Netherlands, 1 UK, Portugal and Norway based study • Ethnicities included White, Danes, Pakistani, Portuguese, Norwegian, Black, Black Asian and Minority, Bangladeshi, Indian, Anglo-Indian, Mixed other, Angolan • 3 studies including asylum seekers, refugees, or those with migrant status • 1 study in context of temporary accommodation provision |
| Accessing charitable food aid | • 8 UK, 1 Netherlands, 1 UK, Portugal and Norway based study • Ethnicities included White, Danes, Pakistani, Portuguese, Black, Black Asian and Minority, Bangladeshi, Indian, Anglo-Indian, Mixed other, Roma, Somalian, Norwegian, Angolan • 1 study involving asylum seekers, refugees • 2 studies involving lone mothers |
| Informal support networks | (Canton, 2016; MacLeod, 2018; O’Connell and Brannen, 2021; Power et al., 2018; Purdam et al., 2015) |
| Healthy start vouchers | • 2 UK, 1 ROI, 1 Netherlands, 1 Denmark based study • Ethnicities not stated • 1 study including asylum seekers, refugees |
| Inability to meet own nutritional needs | (Garthwaite et al., 2015; Jolly, 2018; Neter et al., 2020; O’Connell and Brannen, 2021; Power et al., 2018; Purdam et al., 2015; Stack and Meredith, 2018) |
| Maternal sacrifice | (Jolly, 2018; O’Connell and Brannen, 2021; Ohly, 2018; Power et al., 2018; Purdam et al., 2015; Stack and Meredith, 2018) |
| Physical, mental health & wellbeing impacts | (Garthwaite et al., 2015; Harden and Dickson, 2014; Jolly, 2018; Nielsen et al., 2015; Ohly, 2018; Purdam et al., 2015; Stack and Meredith, 2018) |

*Republic of Ireland Ethnicities (when reported in studies).
negotiated money "... this has either got to go on electric, or something else and I will skip meals" (Stack and Meredith, 2018 p. 236). For mothers living in emergency accommodation, their physical space meant they were unable to store, cook or eat certain foods. This impacted their dietary quality with women expressing how they relied more on ready-meals, snack foods and takeaways than they had done before they became homeless. At best, they described this space as restricted in relation to cooking, storage and consumption “It is very bad because you can’t cook as you want, you can’t eat what you want ... it is busy and you have to wait, and so you go, and no space to cook so I left” (Share, 2019 p. 143). This often resulted in women eating meals on the beds in their rooms. At worst, they described this living environment as hostile, “You have to buy daily because if you buy for long it is going to spoil and if you put it downstairs, they are going to steal it.” (Share, 2019 p. 142).

3.6. Accessing charitable food aid

Some women needed to rely on charitable food aid to increase their food provisions. Although women showed gratitude towards food aid, there was also evidence of unhealthful consequences from accessing food in this way Garthwaite et al. (2015) shows how consuming food provided by foodbanks had negative health consequences for women and mothers, especially those with food intolerances. Mothers in this study spoke of having difficulty digesting wheat and dairy, yet dairy and wheat products were in their food parcels. The tension emerges when the same women describe foodbanks as ‘a lifeline’ due to inherent financial and nutritional insecurity “Knowing there is the food bank there is less of a sense of panic” because “I am constantly looking in my purse” (Purdam et al., 2015 p. 1080). Further, for migrant mothers, the foods supplied were not culturally appropriate (Jolly, 2018), whilst mothers from the Netherlands were dissatisfied and frustrated with the content of their food parcels in terms of nutritional balance (Neter et al., 2020). They spoke of how they often miss foods to prepare a complete meal, that there were “too many sweets and salty snacks” (p. 1650). One woman said, “I have never had so many sweets and salty snacks in my pantry” and that she would prefer a bag of potatoes, apples, or a bunch of bananas instead (Neter et al., 2020 p. 1650). Some foods reported as frequently missing from food parcels were: dairy, fruit, meat, fish, coffee, and fresh foods in general. Food safety was also a concern, with inclusion of foods close to or even beyond their expiry date. Women, therefore, reported the extra burden and labour of checking the food, with one participant stating “On Friday, when I receive my parcel, I spend all afternoon preparing the food. I store it in the freezer so that it stays fresh” (Neter et al., 2020 p. 1651).

Leaning on charitable food aid exemplifies how women were excluded from participating in normal acceptable ways of accessing food. Being dependent on a foodbank went hand-in-hand with a sense of inadequacy, shame, humiliation, guilt, embarrassment, and loss of dignity (Soriano-Rivera, 2017). Purdam et al. (2015) described these unhealthful consequences of accessing free food in terms of ‘hidden costs’. Having to rely on others to merely survive rather than thrive dampened any perceived sense of autonomy. There was a sense of being seen as a ‘failure’ for not being able to afford sufficient food for their family. One mother was embarrassed to attend the foodbank “I thought about coming but wasn’t sure and was embarrassed ...” (Purdam et al., 2015 p. 1079) whilst another described the loss of pride because of attending “It throws your pride out of the window ... I am doing it for my kids, I am not going to make my kids suffer just because of my pride” (Purdam et al., 2015 p. 1079). Yet women and mothers felt a sense of reassurance knowing there was a foodbank. Amongst women experiencing in-work poverty guilt was particularly evident because they perceived others to deserve help more than them. This experience was felt inter-generationally “My mum didn’t feel too happy about it ... she felt bad ... she felt like ... guilty. She personally felt like other people deserved it more than we did” (Spellman, 2021 p. 152). Further, Power et al. (2018) reported on how the psycho-social costs of accessing a food bank were a key reason as to why

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Fig. 2. Representation of the storyline

*Boxes in red dashed lines – Review findings suggest potential pathways to impacting these health outcomes. (For interpretation of the references to colour in this figure legend, the reader is referred to the Web version of this article.)*
it was avoided at all costs. Both Pakistani and White British mothers reported that accessing foodbanks was a last resort and women found support from family first, “There would definitely be some form of intervention before it got to the stage where someone was going to a food bank. The family would intervene and help out financially” (Power et al., 2018 p. 2726). Indeed, some Pakistani women did not know about foodbanks, perhaps highlighting how protective an informal support network can be to mitigating the experience of food insecurity (Power et al., 2018).

3.7. Informal support networks

Women accessed food aid out of necessity rather than choice, preferring first to lean on informal support networks (e.g. family, friends, neighbours) to access sufficient food. Informal support tended to come from other women (O’Connell and Brannen, 2021; Power et al., 2018; Purdam et al., 2015), and there was a ‘gendered organisation of care’ with food insecure women seeking informal support from other women, their mothers, and their partner’s mothers (Power et al., 2018). Purdam et al. (2015 p. 1082) found this gendered care highlighted both inter-generational poverty and the selflessness of mothers, with those helping sometimes sacrificing their own food in the process, ‘When the grandchildren come, they eat properly. I usually manage on some toast and eat at night.” However, for some women, inter-generational poverty meant family were not always able to help. Further, women drawing on assistance from their families often substituted the food they were offered with their unpaid labour as a way of retaining self-esteem and autonomy “I would help out at a lot at home to repay the debt. I would work really hard, I would clean and cook ...” (Power et al., 2018 p. 2724).

Cultural and religious frameworks were also found to strengthen informal support networks, particularly for Pakistani women (Power et al., 2018). Within this culture, “food is always circulating”, not only within families but also “neighbour gives to neighbour”, “it is bad not to give food to your neighbours if someone is hungry while you are well fed” (Power et al., 2018 p. 2725).

3.8. Healthy Start Vouchers

An alternative approach to accessing sufficient healthy food was Healthy Start vouchers, a form of social security provided in the UK. Both Lucas et al. (2013) and Ohly (2018) found that the vouchers had varying impact for mothers in terms of the financial assistance they provided to influence women’s diets. The vouchers were used to: 1) buy additional fruit and vegetables or 2) subsidise food costs. For some mothers, the vouchers were deemed critical in providing a financial safety net for food “You’re sort of relying on the vouchers just to get you a little meal” (Lucas et al., 2013 p. 463). For others, without the vouchers, fruits and vegetables were classified as non-essential and would often ‘fall off the (shopping) list’, one woman said “without (the) vouchers I wouldn’t buy fruit and veg” (McFadden et al., 2014 p. 9). Thus, for some women, vouchers were used to increase the amount of fruit and vegetables bought. These women carefully planned their shopping and were unwilling to compromise on the quality of their diet “we can get clothes from the charity shop, and we do that, but food is important to me” (Lucas et al., 2013 p. 464). Again, this links to the juggling act women face when balancing poverty; in this instance women chose to prioritise healthy food. For most mothers, Healthy Start vouchers were described as a ‘big relief’ or ‘big help’. One mother illustrated how the vouchers helped cover some of the cost of formula when breastfeeding is not going well, saying that it “... takes away the worry about how to feed your baby ...” (McFadden et al., 2014 p. 9). One woman described how the vouchers provide a ‘sense of fairness’ because “it wouldn’t be fair if people like myself couldn’t afford it without the Healthy Start vouchers” (Ohly, 2018 p. 5). However, some families felt that £3.10 a week was not enough and that vouchers could not begin to influence their food shopping practices or help them. Some mothers used the vouchers to ‘alleviate some of the stress associated with providing for the family’ (Ohly, 2018), and money saved was re-directed to cover other essential items “… £20-£30 a month being saved can go towards kid’s clothes, days out, just stuff like that, essential other stuff that you need as well” (Ohly, 2018 p. 7).

3.9. Theme two: embodying food insecurity

The second theme related to the progression from women’s awareness and frustration at their experience of food insecurity, to the embodiment of food insecurity. This includes the tension felt between women’s nutritional desires and their inability to meet them, the sense of resignation to food insecurity, the personal sacrifices mothers make when living with food insecurity, and the embodiment of this experience as it establishes both physical and mental health and wellbeing impacts.

3.10. Inability to meet own nutritional needs

Women’s understanding of healthy eating and their own nutritional needs was evident across the studies, yet women were unable to fulfil their nutritional needs or desires. Most women described healthy eating in terms of fruit and vegetable intake. There was a lack of corresponding reference to other healthy eating measures, such as saturated fat, sugar, or salt intakes. Nevertheless, women had a clear understanding of what they were missing in their diets and how this impacted their health and wellbeing “I really do need lots of broccoli, lots of things with iron in it and meat is one of those things that’s higher in iron and we’re really struggling on that score at the moment” (Garthwaite et al., 2015 p. 42). They were aware of how their personal health needs should be aligned with their nutritional needs, but fulfilling that need was an issue because of the financial barrier to accessing healthy foods. Garthwaite et al. (2015 p. 42) described how women were ‘favouring processed, cheap alternatives’ over fruit and vegetables but there was a sense of frustration at their situation with women doing ‘... the best I can with what I’ve got ... it costs so much to get the food that I need’. One woman was pushed towards buying “tinned foods that are often out of date” rather than fresh produce to prevent the possibility of food waste. She was aware of her health needs, but again unable to fulfil them, constrained financially, and she felt she needed to defend her nutritional knowledge “... I’m not unintelligent, I know what I need to keep my levels going ...” (Garthwaite et al., 2015 p. 42). Jolly (2018 p. 102) supports this notion with one woman identifying, “If I had the resource, more fresh fruit and vegetables, and ... a cleaner diet really, and more cleaner living, at the moment you just have to work with what you’ve got.” Women were not satisfied with their overall dietary intake in terms of variety and a lack of quality, choice, and food type (Halligan, 2019; MacLeod, 2018; Neter et al., 2020). A sense of frustration can be felt through unwelcome compromises, “I don’t like giving [giving] them junk” (Halligan, 2019 p. 210). However, this frustration went beyond the self and being unable to meet nutritional desires. There was an ethical trade-off between different types of food, where women were unable to meet their ideals of consuming sustainably. They wished for products of higher quality in terms of ingredients but also in relation to the way they had been produced and processed. Women were conscious of how environmentally-friendly products were, and how their food parcels and overall diet did not meet these values (Neter et al., 2020).

3.11. Maternal sacrifice

Not only were women unable to fulfil their own nutritional desires but mothers across the studies spoke of sacrificing the food they did have for their children. Maternal sacrifice was cross-cultural, with all mothers prioritising food for their children over themselves. One migrant mother living in Birmingham, UK, said that she would “… spend a whole day when I don’t eat at all, or a day when I just eat once” or eat “whatever he’s left over, or otherwise I just get some smart price noodles or bread, 40p bread” to ensure her children can eat (Jolly, 2018) p103. Sacrifice helped maintain children’s nutritional intake whilst coping with
irregular access to food (Jolly, 2018; O’Connell and Brannen, 2021). This sacrifice impacted dietary quality, quantity, and pattern. This is seen again in Power et al., (2018 p. 2724), where both Pakistani and White British mothers prioritised their children’s needs before their own, “I won’t eat breakfast, I won’t eat dinner, I won’t eat tea, just to make sure there is enough food for the kids”. Mothers felt a ‘strong sense of responsibility’ toward their children (Ohly, 2018). For some women this meant they were willing to make sacrifices at the cost of themselves and their unborn child. For example, a pregnant mother of a 2- and 4-year-old spoke of how vouchers were being used as a bundle for her family. Even whilst pregnant she would go hungry for her toddlers without questioning her actions “… you are always going to give it to your children first. You would leave yourself hungry for your children” (Ohly, 2018 p. 6).

This sense of responsibility was heightened for lone mothers, who spoke of reducing their own food intake and going hungry, thus impacting their dietary quality. This sacrifice was used strategically to meet the demands of poverty and its different aspects. Meals would be skipped to pay utility bills, or to ensure that debt was not accumulated “I’ve got £5 at the end of the week … this has either got to go on electric or … I will skip meals” (Stack and Meredith, 2018 p. 235). Mothers were constantly having to re-evaluate their priorities to ensure they had enough money to buy some food for themselves and their children, “I’m not going to do that extra load of washing, just because I don’t know if I can afford it, and I need to make sure I’ve got money in my purse to go and do food shopping” (Stack and Meredith, 2018 p. 236). However, maternal sacrifice was not just equated with food. As indicated previously, some mothers sacrificed their pride to attend foodbanks so they could access sufficient food for their children, perhaps due to perceptions that being able to feed your family is a marker of ‘good mothering’ (MacLeod, 2018). Finally, maternal responsibility did not switch off once the child turned 18 years old or when women became grandparents. Power et al. (2018) and Purdam et al. (2015) both found that maternal sacrifice of food was inter-generational. One grandmother attended foodbanks so she could access sufficient food whilst saving money to pay bedroom tax for the bedroom her grandchildren used when they stayed with her, “The Benefits Agency told me to ask my daughter for the extra money for the bedroom tax … I need the room when my grandchildren come to stay. I am too embarrassed to ask her so just save on other things and come here as well” (Purdam et al., 2015 p.1082).

3.12. Physical and mental health and wellbeing impact

Across all studies it was clear that not getting enough food, or the right kind of food came at a cost. The cost was embodied by women which manifested physically and mentally moving them on a trajectory towards sub-optimal health. Mirroring the deprivation of income at the end of each month, Garthwaite et al. (2015 p. 41) describe how the cyclical nature of food availability within the household influenced one woman’s body weight “I’m putting weight on in the first week and then I’m losing it on the second week cos there’s no more food”. Whilst for another woman with difficulty digesting wheat and dairy, the cyclical nature of dietary quality impacted her gut health “so we’ll maybe have a healthy week but then we’ll maybe have quite a poor nutrition week … the other week I bake a lot so we eat scones, there’s no meat involved, we’ll have pasta just with a plain sauce cos there’s no fruit or veg to put into it … but without any fruit or veg in it, that’s when I start to get stomach problems …”. Yet, despite the negative health consequences felt by these women, they were financially unable to make changes to the quality of their diet, as one woman said “… but we can’t afford to do anything other at the moment’ (Garthwaite et al., 2015 p. 42). For other women, food insecurity was embodied as light headedness or panic attacks, whilst for lone mothers it was reported that ongoing uncertainty around access to sufficient food resulted in ‘sleepless nights’ and physical feelings of sickness (Stack and Meredith, 2018). Indeed, the impacts of poor nutrition on health had an impact on some women’s ability to function productively. This contributed to not being able to hold down a long-term job role. One woman described needing to “nick some of the sugar from the coffee machine” to see her through to lunchtime (Spellman, 2021 p. 154). Not only was she experiencing a lack of energy to perform her role, but she felt conscious of colleagues’ perceptions of her and her work identity (Spellman, 2021).

Fundamentally, across the studies, food insecurity impacted women’s mental health and wellbeing. This began as worrying about having enough money to buy food “You do think ‘what if I get to the checkout and I’ve not got enough’ … So aye, you’re constantly thinking” (Harden and Dickson, 2014 p. 384), but became ingrained in almost all aspects of life. Embodied into women’s everyday lives was worry about sufficiency of resources alongside continual re-prioritisation and juggling of resources. An internalised manifestation of this insecurity dampered self-esteem. Thus, self-reliance in relation to food was important for women to feel a sense of agency, and women spoke of needing their cupboards to be full, and having food in reserve, to feel secure, yet this was often not the case. Further, for mothers, this inability to feed their family was perceived as their inability to be a ‘good mother’ (Canton, 2018; Spellman, 2021). For lone mothers this experience of worry felt heightened. They described feeling ‘trapped’ or ‘hopeless’ at needing to rely on other people, and in turn spoke of how they experienced ruminating thoughts and ongoing worry and stress about financing food. For some, feelings of hopelessness and depression were experienced “I’ve had sleepless nights and nights full of tears, where I’ve just thought I literally don’t know how I’m going to get through the next few days. I’ve got no food, no money … So yeah, definitely times where I’ve felt very, very depressed about the situation and can’t see a way out of it almost” (Stack and Meredith, 2018 p. 235). Jolly (2018 p. 102) provides an example of how, whilst wanting a better diet, some women were resigned to the reality of what they could afford, one woman said “I can’t change nothing about my diet because when you’re poor, you just have to live with what you’ve got …”. This sense of resignation was echoed by women in Stack and Meredith (2018 p. 235) where lone mothers had sole responsibility for their children, “I’ll be having toast for dinner. That’s, that’s kind of life really”, ‘there are cases where I will skip meals’. This indicated that over a period, women have lost hope in moving out of poverty.

4. Discussion

This review provides a progressive ‘storyline’ of women’s experiences of food insecurity and the ways in which: they attempt to access sufficient food, they are unable to meet their nutritional needs, this is embedded into their everyday lives, and embodied in unhealthy physical, social, and mental health and wellbeing impacts.

4.1. Nutritional health and wellbeing impacts of being unable to access sufficient food

Resonating with previous literature (Attree, 2005; Hayter et al., 2015), this meta-ethnography illustrates that women were aware of healthy eating and how to meet their nutritional needs. At a European level, the food and nutrition action plan by the WHO’s for Europe encourages member-states to promote the gains of a healthy diet throughout life especially for the most vulnerable groups (World Health Organization, 2014), for example by adopting a health-in-all-policies approach. In the UK, where the majority of included studies were set, women referred to fruit and vegetables, reflecting the widespread public health campaigns promoting five-a-day and Better Health (National Health Service, 2018; Public Health England, 2021). They showed a responsible attitude toward budgeting for, procuring and preparing food, with studies portraying their daily juggling act. Yet they were still unable to access sufficient healthy food for their families. Structural factors, such as income, social security and inflation, limit decisions around food choices and practices, for example, the increase in food and living costs (Harral et al., 2022). Healthy foods are three times more expensive per calorie than less healthy foods, and the poorest fifth of UK
households would need to spend 40% of their disposable income on food to afford the Eatwell guide (The Food Foundation, 2021). Inequality of material resources at individual-and community-level accumulates over the life course. Being unable to access a nutritious, balanced diet will, over time, result in poorer health outcomes. There is a need for income-based solutions to address this root cause of food insecurity, which is poverty. The 2021 National Food Strategy, an independent review of England’s food system, proposed recommendations to reduce diet-related inequality (National Food Strategy, 2021). Relevant to women, these included: extending the Healthy Start Scheme a cash benefit, an upstream intervention offering women the choice to buy fruit and vegetables; and trialling a ‘community Eatwell’ programme enabling GPs to socially prescribe fruit and vegetables along with food-related education and social support to those with food insecurity (National Food Strategy, 2021). However, this suggests that those who are food insecure need food-related education, which does not align with the findings of this review. Moreover, this perception has the potential to amplify stereotypes and stigma around those who experience poverty i.e., being low in competence and personally failing (Fell and Hewstone, 2015).

Instead, this review explicitly recognises the multiplicity of poverty and inequality which policy and research has fragmented over recent years, e.g., into ‘food poverty’ or ‘fuel poverty’ (Crossley et al., 2019). A ‘whole system’ poverty lens emphasises that lived experience of food insecurity is about more than access to food, including access to fuel, space, and equipment to cook. This was explicitly shown amongst mothers living in temporary accommodation, for whom access to a (non-hostile) kitchen to cook food and a space to enjoy meals was not guaranteed. The ongoing cost of living crisis that has hit people with increased food, fuel, and electricity bills will not alleviate pressure on these multiple poverties (Thompson et al., 2022). Responses from respective Governments across Europe will determine whether this contributes to increasing food insecurity (Davis and Geiger, 2017; Loostra et al., 2016). In this review, women and mothers were constantly re-prioritising resources to balance sufficient food within the household with other essential needs, reflecting what Lister (2004) describes as the ‘work’ involved in getting by when living in poverty (Lister, 2004). The post-2008 recession is the longest, deepest and widest recession, worse than the ‘great depression of the 1930s (Bambra et al., 2016). It is well recognised that the recession and austerity in response to the 2008 global financial crises have unequally impacted the most vulnerable people with them facing the largest cuts to public budgets and increasing unemployment (Karankilos et al., 2013). Despite a 17 year gap with Attree’s (2005) systematic review of qualitative studies on the lived experience of poverty, we similarly find that food insecurity is a managed process, with ‘strategic adjustments’ embedded within women’s daily lives. Further, it is apparent that women’s everyday lives are embedded within wider socio-economic situations; and the context of economic recession and austerity were palpable. Although women did their best to negotiate this context, the reality of increasing food prices, benefit cuts and lack of flexible, secure employment were un conducive to protecting the basic human need of healthy food.

The European Federation of Food Banks was established in 1986 (European Food Banks, 2021), however, shifts in the growth and need of food aid have occurred over the last few decades. For example, in Spain, 2008 was a particular juncture of growth of food aid and need (Lambie-Mumford and Silvasti, 2020) whilst for the UK this occurred in 2010 (Lambie-Mumford and Silvasti, 2020). In Portugal, food banks have proliferated with increasing demand since 2008 (O’Connell and Brannen, 2021). These shifts appear to coincide with regressive changes to social policy and welfare reform underpinned by neo-liberal ideologies (Davis and Geiger, 2017; Lambie-Mumford and Silvasti, 2020; O’Connell and Brannen, 2021). This review highlights food aid as a last resort, despite perceptions of foodbank misuse in the media (Paige, 2013). Women described it as a ‘life line’ reiterating their position of desperation. Echoing previous research (Chase and Walker, 2012; van der Horst et al., 2014) there was a tension surrounding women’s experiences with food aid. Women who accessed food aid described both gratitude towards it and the hidden costs of its use, mainly psychosocial. Embedded within accounts were what Retzinger (1995: 1107) calls ‘colloquialisms of shame’; verbal cues signaling the emotional and psychological impact of being unable to meet expectations set by themselves or society (Chase and Walker, 2012; Retzinger, 1995). Chase and Walker (2012) describe poverty as a breeding ground for shame given the society we live in, where material resources facilitate participation in the social world and are a marker of success. They argue that shame can take on a dynamic of its own, playing a role in human behaviour. The women who felt shame in our review distanced themselves from the socially constructed ‘them’ by avoiding social situations such as eating out, despite this leading to social isolation. Such poverty-related shame can lead to people pretending they are coping because the risk of losing pride is too great (Chase and Walker, 2012). Pride for women was linked to ‘being a good mother’, which entailed providing sufficient food for their family. Requiring food aid signified an inability to meet this expectation set by themselves and the rhetoric of society. Consequently, this became entrenched into narratives of failure, linking to a feeling of powerlessness alongside physical and psychological deterioration. As Poppendick asserted, the idea of the independent person is strong in our culture, making the idea of having to ask for help for the basic need, food, degrading (Poppendieck, 1999). This shows how food is about more than nutrition but intertwined with feelings of dignity and worth. Healthy Start Vouchers were viewed as a more ‘dignified’ approach to accessing sufficient food for women. In 2021 changes to the Healthy Start scheme meant increased value (from £3.10 to £4.25 per week), and the voucher switched to a top-up card available to use anywhere accepting Mastercard, with the option to save money toward a larger one-time spend. Whilst there is yet to be an evaluation of this new approach, women in this review reported the ‘nutritional safety net’ of vouchers, which reduced stress and worry.

In this review the role of informal and external support networks was evident. External support focusses on redistribution strategies, such as food banking (Lambie-Mumford, 2015), whilst informal support uses reciprocity strategies, such as mutual aid groups (Laverty, 2019). Although, for Pakistani women their cultural and religious frameworks strengthened their informal support networks, mitigating food aid use. Women in this review often substituted the food offered for unpaid labour to retain self-esteem and autonomy despite their networks providing unconditional support. Informal networks of care were protective against food insecurity and helped facilitate opportunity for social eating. These networks fostered a gendered organisation of care; the labour market has structurally catered for women’s caring roles within the household by segregating women toward low-pay sectors and short-term contracts (Beatty et al., 2021). This review shows that women remain shock absorbers in poor households and are the first to go without when food budgets are tight. Like Attree’s (2005) review, this review found that across all studies ‘maternal sacrifice’ was used to manage food insecurity, consequently impacting maternal diet, nutrition, and health. Maternal sacrifice suggests that other coping strategies have been ineffective at providing enough food. Mothers therefore are sacrificing nutritious foods, substituting for cheaper, energy-dense foods or skipping meals reducing their overall intake (Franklin et al., 2012). Despite facing economic difficulties, women engaged in the moral narrative of ‘good mothering’ through their food practices (Harden and Dickson, 2014). By sacrificing food for their children, women demonstrated their role as a mother as priority and central to their identity. Further, our review demonstrates maternal sacrifice remains gendered and trans-generational.

Women described strategies used to negotiate their food insecurity, such as stopping social eating outside of home and with others. Eating together, referred to as ‘commensality’ creates bonds and builds community (Fischler, 2011). The inability to participate in social eating thus, ...
negatively impacted women’s quality of life because of reduced social connection and enjoyment around food. Evidence shows social eating is pleasurable and enhances the taste of food, whether good or bad (Boothby et al., 2014; Herman et al., 2019; Woolley and Fishbach, 2017). Eating is a biological necessity, but food is also social and cultural (Murcott, 2019). Fischer (2011) proposes eating as the ‘primary social function’ because traditionally acquiring, preparing, and distributing food was done co-operatively, with meals eaten in a social context. National data from the UK supports this, concluding that social eating may be an evolutionary mechanism designed to increase social bonds (Dunabr, 2017). This review found that some women-maintained commensality by having friends bring their own food to their home, demonstrating perhaps a strong bond with these friends prior to their experience of food insecurity, or their acknowledgment of the importance of social eating to their wellbeing. Whilst for Pakistani women, hospitality was of importance culturally and as food was a vehicle for the expression of enjoyment, therefore they sacrificed other luxuries for food. The emergence of social eating initiatives, such as the food aid system (Smith and Harvey, 2021). This may fulfill two needs, the first of achieving social goals through the process of support, and secondly, an alternative mode of food provisioning that challenges the charitable food aid system (Smith and Harvey, 2021). This may fulfill two needs, the first of achieving social goals through ‘alimentary participation’, as well as fulfilling a material necessity about pooling resources.

4.2. The process of embodying food insecurity

This review details the progression of women’s experiences of food insecurity from awareness and frustration to the embodiment of this experience as it establishes both physical and mental health and wellbeing impacts. In an interview, Dowler explains how food insecurity can impact health: “Not having enough food is a very private issue. [...] It is an issue of private shame. [...] And it is an issue of private suffering. If you are not good at getting enough food, or the right kind of food, you absorb the misery yourself. The cost is embodied by you. It is your body that becomes unhealthy” ((Harrison, 2014) p.1). In other words, the body keeps score of what we are experiencing, and embodied reminders influence the way we move (or not) in the world (Van der Kolk, 2015). The concept of embodiment originates from eco-social theory of health inequalities (Krieger, 2021), acknowledging that, as humans, we are both social beings and biological organisms. Over time, the environment is embodied into bodily characteristics such as weight status, or specific gene expressions through both conscious and unconscious processes. This review demonstrates that women’s interaction with precarious food insecure environments led to temporal transformation of bodily characteristics through conscious and unconscious processes. Conscious processes refer to lacking agency over decisions (Krieger, 2005). Women lacked food choices whilst also being aware of their social position through their inability to access sufficient food in socially acceptable ways, which impacted on mental health and wellbeing. As Halligan (2019) explains, the impacts of poverty on exclusion from mainstream consumer society highlights the way that these people feel ‘different’, impacting on their sense of pride and self-worth. For women in this review, experiences of insecurity over time led to a sense of resignation and hopelessness. Further, for lone mothers, this progressed to feeling trapped, rumination, experiencing depression and suicidal thoughts. Anxiety and depression are compounding factors of metabolic disease over time and food insecurity is strongly associated with anxiety and depression (Arena et al, 2019).

Unconscious processes of embodying food insecurity include the physiological effects resulting from the consumption of inappropriate foods for dietary needs, or the inability to maintain consistent dietary patterns. Our review findings support Basiotis’s work highlighting that households with tightening budgets meet their energy intakes at a lower cost by purchasing cheaper energy dense foods to save money (as cited in Drewnowski and Specter, 2004). Nevertheless, this review is not able to directly link low-cost energy dense diets to being ‘obesity promoting’. Most accounts from women did not link their dietary quality with weight status, although they did indicate that their dietary quality was linked to gut health issues and feelings of sickness. However, several mothers described the impact that the cyclical nature of food insecurity had on their weight status. Mothers often skipped meals throughout the month to ensure that their children had enough to eat and that they could afford other competing expenses. The inability to afford enough food for their family led some women to have sleepless nights from the ongoing emotional distress (i.e. worry and stress). Sleep duration is linked to overweight and obesity, with short sleepers (defined as less than 6hrs per night) twice as likely to experience obesity (Cooper et al., 2018). Short sleep not only means there is a greater window for eating and drinking but also leads to dysregulation of hunger hormones increasing ghrelin and lowering leptin resulting in higher energy intakes (Cooper et al., 2018). In other words, food choices sway toward higher fat, sugar and salt products which have increased reward sensitivity (Cooper et al., 2018). In addition, tiredness can lead to less physical activity (Cooper et al., 2018). Women in this review felt ongoing stress. Stress arises due to activation of the sympathetic nervous system. Prolonged activation of the sympathetic nervous system is damaging for health, resulting in reduced biological resilience over time. Research shows chronic stress to be a risk factor influencing visceral fat accumulation and chronic disease (Groesz et al., 2012; Laraia, 2013). Activation of the sympathetic nervous system can indirectly lead to weight gain through metabolic changes and fuel oxidation (Guarino et al., 2017). Hence, chronic stress could be a pathway through which poorer nutrition-related health outcomes, such as overweight and obesity, manifest, although stress alone does not account for the relationship between socioeconomic disadvantage and obesity (Aggarwal et al., 2011).

We identified a lack of studies from non-UK European countries. Nevertheless, it was possible to compare across included studies for diverse experiences of food insecurity between different population groups, in particular lone mothers (n = 3), and migrant women (n = 3). These were the only two groups of women to express what Attree (2005) calls ‘resigned adjustment’ where adjustments to eating practices and diet are taken for granted, as part of life. The experience of migrant women appeared more severe, that is they were reflective of very low food security, due to tighter budgets, perhaps given the precarity around their rights to remain in a country and rights to social security. Economic constraints, lack of knowledge about new foods, language barriers, difficulties shopping as well as religious compliance are all associated with more severe food insecurity (Henjum et al., 2019). Their accounts portrayed a heightened awareness of money where not wasting food was essential for survival. Meanwhile, accounts from lone mothers illustrated heightened levels of psychological impacts as a result of food insecurity, perhaps due to the sole responsibility and financial burden that lone mothers endure. Indeed, lone parents are a group shown to experience higher levels of poverty than families generally (Women’s Budget Group, 2019). Globally, governments have attempted to address this issue by encouraging employment through making receipt of benefits conditional to efforts to find work, known as Welfare to Work programmes (Campbell et al., 2016). Yet, research shows that employment does not necessarily reduce poverty for lone parents (Campbell et al., 2016). Indeed, lone parents may have reduced work experience. A systematic review of Welfare to Work across HICs found that the demands of parenting alone and employment are frequently in direct conflict, and lone parents were often denied control over major life decisions and everyday routines by Work to Welfare obligations (Campbell et al., 2016). Further, Welfare to Work programmes did little to improve their health and wellbeing or economic circumstances, instead leading to low-paid, precarious jobs. Meanwhile, in the UK, lone parent obligations introduced in 2008 mean that lone parents lost
entitlements to benefits based solely on being a lone parent (Coleman and Riley, 2012). This may have exacerbated the (already heightened) levels of psychological stress lone parents face as a result of reduced income and consequent food insecurity.

Workshop discussions with women in the North East of England experiencing food insecurity reflected the experiences of participants included in this review. It reflected how living on a tight budget limits women’s ability to treat themselves to non-essential food items such as a coffee and inhibits participating in social eating. It reflected how food insecurity places an emotional and mental toll on women. It also helped broaden the perspectives from this review highlighting issues with the new HSV system and recommending an alternative to food banks; aspects of women’s experiences post 2008 global financial crises, a period which set poverty trajectories to increase, and food insecurity to worsen. A key strength is in our meta-ethnographic approach to the synthesis of review findings, driven by both participant experiences and third order author interpretations. This enabled development of a ‘line of synthesis’ moving beyond the individual studies to ‘more than the sum of its parts’ (Thorne et al., 2004). A common limitation associated with meta-ethnographies is a reliance on the original study author’s pre-selected participant quotes and interpretation of the data in published articles from which the review author generates a ‘line of synthesis’ (Atkins et al., 2008) and our review is also limited by this factor. However, to keep our synthesis grounded in participant experiences, we have presented original quotes throughout our findings, however, we acknowledge that this is still limited by the original authors pre-selecting quotes. However, to keep our synthesis grounded in participant experiences, we have presented original quotes throughout our findings. Rigorous gold standard methodologies were used to develop the protocol (PRISMA-P) conduct the review (PRISMA) and report the findings (e-MERGE Reporting Guidelines). Recognising the limitations of database searches in retrieving qualitative literature, reference and citation screening was included as part of a comprehensive search strategy.

Our review also has several limitations. Like other reviews, it is possible for this review to be subject to publication bias, whereby studies are not published if they do not show clear or marked results (Petticrew et al., 2008). We attempted to overcome this by searching theses databases. In this review, only one included study used the USDA module to measure food insecurity, whilst many others used socioeconomic status and proxy measures. Whilst this might be a product of qualitative studies not using a specific food insecurity measure, it is likely to prevent capturing all the experiences of food insecurity as it only accounts for those accessing a service, not necessarily those in need or who could not access the service. A strength and limitation of this review is the diverse range of included studies, from different European contexts (exclusively Western Europe), where contextual factors could impact the experiences of women. It is important to recognise that different countries have different welfare states, social security, food aid and health care systems (Bambra, 2007). Patterns of food insecurity across countries vary according to welfare regime, with the UK and Republic of Ireland seeing the sharpest rise (Davis and Geiger, 2017). While this variation potentially limits the ability to draw meaningful conclusions from the studies, the diversity of included studies has enabled exploration of perspectives from a broad spectrum of women’s experiences of food insecurity which has demonstrated common experiences from within and across the themes. This review has shown that despite different social security systems and different economic, social, and cultural contexts women are reporting similar qualitative experiences across studies; with data from different countries contributing to both themes and sub-themes except for the sub-theme relating to HSV which is a UK specific food subsidy program. Further, a range of ethnicities, in addition to vulnerable groups including lone mothers, asylum seekers and refugees have contributed to the themes and sub-themes of this review.

Whilst the aim of our review was to focus upon women’s experiences of food insecurity, inevitably much focus within included papers was on motherhood and how this impacted on women’s own levels of food insecurity and food insecurity as a household, particularly as we were interested in nutritional outcomes. Most of the included studies did not discuss motherhood and womanhood independently. This presents a limitation as the two not interchangeable with different experiences of food insecurity likely (Nicolson, 1993).

5. Conclusions

The findings from this review contribute to literature examining the nutritional health and wellbeing experiences of food insecure women within European HICs. Despite food insecurity being such a high priority since 2008 because of its increasing prevalence and parallel increase of food aid use, this review demonstrates a lack of change over time, qualitatively, with regards to women’s experiences of food insecurity. Lone mothers and migrant women were particularly vulnerable to more severe experiences of food insecurity as the only groups of women to articulate resignation to food insecurity. They shared heightened psychological impacts from trying to access sufficient food and worse physical health impacts due to seemingly more prolonged episodes of going without enough food. There is a need to further explore, first, how pregnant women experience food insecurity in relation to its impact on their nutritional health and wellbeing within the European context – we identified no studies focusing solely on food insecure pregnant women. Second, the ways in which stigma and shame influence nutritional health and wellbeing outcomes for those living with food insecurity to develop health policies that recognise, understand and address this. Third, differences between how women accessing food aid services perceive the service and food on offer and how food aid service staff perceive the situation. Finally, there is a need to evaluate the updated Healthy Start scheme to determine if the changes are effective and contributing to reducing nutritional inequalities for women and young children. This review emphasises that food insecurity directly and tangibly impacts women’s nutritional health and wellbeing. It concludes that there needs to be greater recognition of the psychosocial impact of food insecurity on vulnerable women and in addition to its impact on their nutritional health and wellbeing.

Data availability

The authors do not have permission to share data.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.socscimed.2022.115313.
France, E.F., Uny, I., Ring, N., Turley, R.L., Maxwell, M., Duncan, E.A.S., et al., 2019b. A methodological systematic review of meta-ethnography conduct to articulate the complex analytical phases. BMC Med. Res. Methodol. 19, 35.

Franklin, B., Jones, A., Love, D., Puckett, S., MacKlin, J., White-Means, S., 2012. Exploring mediators of food insecurity and obesity: a review of recent literature. J. Community Health 37, 253-264.

Garthwaite, K., Collins, P.J., R., 2015. Food for thought: an ethnographic study of negotiating ill health and food insecurity in a UK foodbank. Soc. Sci. Med. 1982 (152), 38-44.

Groesz, L.M., McCoy, S., Carl, J., Sadow, L., Stewart, J., Adler, N., et al., 2012. What is stress? Stress and the drive to eat. Appetite 58, 717-721.

Guadrito, D., Nannipieri, M., Iervasi, G., Toddei, S., Bruno, R.M., 2017. The role of the autonomic nervous system in the pathophysiology of obesity. Front. Physiol. 8, 665-680.

Halligan, J., 2019. Social (in)security. In: Exploring Welfare Reform, Poverty and Health in North East England. Newcastle University, p. 382. Institute of Health and Society.

Hanson, K.L., Connor, L.M., 2014. Food insecurity and dietary quality in US adults and children: a systematic review. Am. J. Clin. Nutr. 100, 684-692.

Harden, J., Dickson, A., 2014. Low-income mothers’ food practices with young children: a qualitative longitudinal study. Health Educ. J. 74, 381-391.

Harrad, D., Francis-Denève, R., Bolton, P., Keep, M., 2022. Rising Cost of Living in the UK. House of Commons Library, pp. 1-45.

Harrison, J., 2014. The Foodbank Dilemma. The New Statesman.

Harvey, K., 2016. When I go to bed hungry and sleep, I’m not hungry’: children and parents’ experiences of food insecurity. Appetite 99, 235-244.

Hayter, A.K.M., Draper, A.K., Ohly, H.R., Rees, G.A., Pettigrew, C., McGlone, P., et al., 2015. A qualitative study exploring parental accounts of feeding pre-school children in two low-income populations in the UK. Matern. Child Nutr. 11, 371-384.

Healy, A.E., 2019. Measuring food poverty in Ireland: the importance of including exclusion. J. U. Soc. J. 77, 127.

Hemmeringsen, E., 2014. A new model of the role of psychological and emotional distress in promoting obesity: conceptual review with implications for treatment and prevention. Obes. Rev. 15, 769-779.

Hemmeringsen, E., 2018. Early childhood obesity risk factors: socioeconomic adversity, family dysfunction, offspring distress, and junk food self-medication. Curr Obes Rep 7, 204-209.

Henjum, S., Moenst, M.S., Arnold, C.D., Mannu, D., Terragni, L., 2019. I worry if I will have food tomorrow: a study on food insecurity among asylum seekers living in Norway. BMC Public Health 19, 592.

Herman, C.P., Polivy, J., Pliner, P., Vartanian, L.R., 2019. Effects of social eating. In: Herman, C.P., Pliner, P., Vartanian, L.R. (Eds.), Social Influences on Eating. Springer International Publishing, Cham, pp. 215-227.

Institute, Q.C.R., 2020. Rayyan QCIR. International Labour Organisation, 2020. The Impact of the COVID-19 Pandemic on Jobs and Incomes in G20 Economies.

Ivers, L.C., Cullen, K.A., 2011. Food insecurity: special considerations for women. Am. J. Clin. Nutr. 94, 1740-1744.

Jolly, A., 2018. You just have to work with what you’ve got’ practitioner research with precarious migrant families. Practice 30, 99-116.

Karanikolos, M., Mladovsky, P., Cyohn, J., Thomson, S., Banu, S., Stuckler, D., et al., 2013. Financial crisis, austerity, and health in Europe. Lancet 381, 1323-1331.

Krieger, N., 2005. Embodiment: a conceptual glossary for epidemiology. J. Epidemiol. Commun. Health 61, 1078.

Krieger, N., 2021. Ecosocial Theory, Embodied Truths, and the People’s Health. Oxford University Press.

Lambie-Mumford, H., 2015. Food poverty and food charity in the United Kingdom. In: Lambie-Mumford, H. (Ed.), Food insecurity and food charity in North East England: a qualitative longitudinal study. Sociol. Health Illness 41, 258-273.

Lambie-Mumford, H., Silvasti, T., 2020. Introduction: exploring the growth of food poverty in North East England. Newcastle University, p. 382. Institute of Health and Society.

Laverty, L., 2019. Managing food insecurity through informal networks of care: an ethnography of youth practices in the North of England. Sociol. Health Illness 41, 701-722.

Leet, R., 2004. Poverty, Polity, Cambridge, UK: Malden, MA.

Looopstra, R., 2020. Vulnerability to food insecurity since the COVID-19 Lockdown. The Food Foundation, Kings College London.

Looopstra, R., Reeves, A., McKee, M., Stuckler, D., 2016. Food insecurity and social protection in Europe: quasi-natural experiment of Europe’s great recessions 2004-2012. Prev. Med. 89, 44-50.

Lucas, P.J., Jessiman, T., Cameron, A., Wiggins, M., Hollingworth, K., Austerberry, C., 2013. Healthy Start Vouchers Study: the Views and Experiences of Parents, Professionals and Small Retailers in England. Macmillan, MA, 2018. Understanding the rise of food aid and its implications for the welfare state: a study of Scotland and Finland. In: Urban Studies. University of Glasgow, pp. 125-159.

McEuen, A., Green, J.M., Williams, V., McLain, J., McCormick, F., Fox-Rushby, J., et al., 2014. Can food vouchers improve nutrition and reduce health inequalities in low-income mothers and young children: a multi-method evaluation of the experiences of beneficiaries and practitioners of the Healthy Start programme in Scottish health boards. BMC Public Health 14, 125.

Mort, L., 2017. Migrant Families and Their Support Networks: Narratives of Austerity. Manchester Metropolitan University.
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Murcott, A., 2019. Introducing the Sociology of Food & Eating Great. Bloomsbury Publishing Plc, Britain.

Myers, C.A., Mirer, F.E., Katzmarzyk, P.T., 2020. Trends in adiposity and food insecurity among US adults. JAMA Netw. Open 3, e2012767–2012767.

National Food Strategy, 2021. National Food Strategy: Independent Review: the Plan. National Health Service, 2018. 5 A Day: what counts? Eat Well.

Neter, J.E., Dijkstra, S.C., Nicolaou, M., Visser, M., Brouwer, I.A., 2020. The role of food parcel use on dietary intake: perception of Dutch food bank recipients - a focus group study. Pubb. Health Nutr. 23, 1647–1656.

Nettle, D., Andrews, C., Bateson, M., 2017. Food insecurity as a driver of obesity in humans: the insurance hypothesis. Behav. Brain Sci. 40, 1–14.

Nicolson, P., 1993. Motherhood and women’s lives. In: Richardson, D., Robinson, V. (Eds.), Introducing Women’s Studies: Feminist Theory and Practice. Palgrave Macmillan UK, London, pp. 201–223.

Nielsen, A., Lund, T.B., Holm, L., 2015. The taste of ‘the end of the month’, and how to avoid it: coping with restrained food budgets in a scandinavian welfare state context. Soc. Pol. SOC. 14, 429–442.

Noblit, G., Hare, D., 1988. Meta-Ethnography: Synthesising Qualitative Studies. Sage Publications, Newbury Park.

O’Connell, R., Brannen, J., 2021. Families and Food in Hard Times: European Comparative Research. UCL Press.

Ohly, H., 2018. A Realist Investigation of the Impact of Healthy Start on the Diets of Low-Income Pregnant Women in the UK. University of Central Lancashire, p. 219. School of Community Health and Midwifery.

Page, M.J., McKenzie, J.E., Bossuyt, P.M., Boutron, I., Hoffmann, T.C., Mulrow, C.D., et al., 2021. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 372, n71.

Paige, J., 2013. Iain Duncan Smith Leaves Commons Food Banks Debate Early. The Independent.

Petticrew, M., Egan, M., Thomson, H., Hamilton, V., Kunkler, R., Roberts, H., 2008. Publication bias in qualitative research: what becomes of qualitative research presented at conferences? J. Epidemiol. Community Health 62, 552–554.

Poppendieck, J., 1999. Sweet Charity?: Emergency Food and the End of Entitlement. Poppendieck, J., 1999. Sweet Charity?: Emergency Food and the End of Entitlement. Bloomsbury Publishing, Newbury Park.

Power, M., Small, N., Doherty, B., Pickett, K.E., 2018. Hidden hunger? Experiences of food insecurity amongst Pakistani and white British women. Br. Food J. 120, 2716–2732.

Public Health England, 2021. Better Health: Let’s Do This. Public Health England, 2021. Better Health: Let’s Do This. Puddefoot, J.-A., Keenan, G.S., Fielden, A., Reaves, D.L., Halford, J.C.G., Hardman, C. A., 2020. ‘Eating to survive’: a qualitative analysis of factors influencing food choice and eating behaviour in a food-insecure population. Appetite 147, 1054–1057.

Purdam, K., Garratt, E.A., Emnail, A., 2015. Hungry? Food insecurity, social stigma and embarrassment in the UK. Sociology 50, 1072–1088.

Qvr International, 2020. NVivo.

Retzinger, S.M., 1995. Identifying shame and anger in discourse: prod. Am. Behav. Sci. 38, 1404.

Share, M., 2019. Housing, food and dignity: the food worlds of homeless families in emergency accommodation in Ireland. J. Soc. Distress Homeless 29, 137–150.

Singh, J., 2013. Critical appraisal Skills programme. CASP appraisal tools. J. Pharmacol. Pharmacoether. 4, 76.

Smith, M., Harvey, J., 2021. Social eating initiatives and the practices of commensality. Appetite 161, 105107.

Soriano-Rivera, 2017. Exploring the Uneven Effects of Economic Recession and Austerity on Lone Mothers: A Critical Realist Intersectional Approach. Durham University.

Spellman, C., 2021. Work Poverty in the UK: the Stories of Working Women Using Food Banks. Managing and Marketing. Durham University, pp. 128–174.

Spencer, S.R., 2015. Practices of Food and Diet in an Urban Context. Robert Gordon University Aberdeen, p. 121.

Stack, R.J., Meredith, A., 2018. The impact of financial hardship on single parents: an exploration of the journey from social distress to seeking help. J. Fam. Econ. Issues 39, 233–242.

Stephenson, J., Heslehurst, N., Hall, J., Schoenaker, D.A.J.M., Hutchinson, J., Cade, J.E., et al., 2018. Before the beginning: nutrition and lifestyle in the preconception period and its importance for future health. Lancet 391, 1830–1841.

Tacconelli, E., 2010. Systematic reviews: CRD’s guidance for undertaking reviews in health care. Lancet Infect. Dis. 10, 226.

The Food Foundation, 2021. Dietary Inequalities: Making the Food System Fairer. Thompson, C., Siddiqui, T., Loszyn, K., Leese, D., Wincup, E., Embleton, B., 2022. Take Action Now to Narrow the Gap between Incomes and the Cost of Living.

Thompson, C., Smith, D., Cummins, S., 2018. Understanding the health and wellbeing challenges of the food banking system: a qualitative study of food bank users, providers and referrers in London. Soc. Sci. Med. 211, 95–101.

Thorne, S., Jensen, L., Kearney, M.H., Noblit, G., Sandelowski, M., 2004. Qualitative metasynthesis: reflections on methodological orientation and ideological agenda. Qual. Health Res. 14, 1342–1366.

Turk, A., Boylan, A.M., Locom, L., 2017. A Researcher’s Guide to Patient and Public Involvement. Health Talk Oxford University.

USDA, 2021. Survey Tools. van der Horst, H., Pascucci, S., Bol, W., 2014. The ‘dark side’ of food banks? Exploring emotional responses of food bank receivers in The Netherlands. Br. Food J. 116, 1506–1520.

Van der Kolk, B.A., 2015. The Body Keeps the Score : Mind, Brain and Body in the Transformation of Trauma. Penguin Books, London, UK.

van der Velde, L.A., Schuilenburg, L.A., Thrivikraman, J.K., Numans, M.E., Kieft-de Jong, J.C., 2019. Needs and perceptions regarding healthy eating among people at risk of food insecurity: a qualitative analysis. Int. J. Equity Health 18, 184.

Women’s Budget Group, 2019. DWP Data Reveals: Women and Children Continue to Be Worst Affected by Poverty, Woolley, K., Fishbach, A., 2017. A recipe for friendship: similar food consumption promotes trust and cooperation. J. Consum. Psychol. 27, 1–10.

World Health Organization, 2014. European Food and Nutrition Action Plan 2015–2020.

World Health Organisation for Europe, Yang, T.C., Sabosta, P., Pickett, K.E., Bryant, M., 2018. Association of food security status with overweight and dietary intake: exploration of White British and Pakistani-origin families in the Born in Bradford cohort. Nutr. J. 17, 48.