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Research article

Paying lip service to health: An analysis of health in climate change mitigation policies in Spain

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ABSTRACT

A significant body of research points to the serious health dimensions of climate change. Yet, research suggests that the health agenda has so far had a limited role in global climate change policy. This study sets out to examine if and how health is represented in climate change mitigation policies in Spain. Through an interpretive discourse analysis following the 'What's the Problem Represented to be' framework, I examine whether climate change is represented to be a health 'problem' in key national policy documents and explore the meanings that stakeholders assign to climate change and health in Spain. This analysis suggests that climate change is hardly represented to be a health 'problem' in Spanish climate change mitigation policies. Instead, climate change mitigation is represented to be an economic and labour market problem. Health is relegated to the climate adaptation agenda. In turn, the representation of health is limited to quantitative gains led by air pollution reduction associated with the implementation of policies. This finding is consistent with literature in the health and climate change field. This study identifies a discrepancy between key stakeholders' ambitions to make health an overarching priority and its limited consideration in policy documents. This article concludes that the policies pay lip service to health. The importance of health is acknowledged but the measures proposed in the policies are neither driven by nor target health goals. A discrepancy between the ambition to prioritise health and its limited consideration in policy is observed. Further research on the representation of health in climate policy elsewhere would supplement these findings.

1. Introduction

There is high scientific confidence that processes associated with climate change affect human health, exacerbating existing global health challenges and creating new ones [1]. Climate change, which has been characterised as the biggest global health threat in the 21st century [2], negatively impacts health outcomes: from changing disease patterns to food insecurity and mental health [2,3].

Responses to climate change include mitigation and adaptation [4]. Adaptation refers to activities that "moderate potential damages or benefit from opportunities associated with climate change" [5]. Mitigation aims to lessen the severity of climate change by reducing fossil fuel emissions [6].

Every policy affects health outcomes [7] and policy proposals tend to gain support if their positive health effects are conveyed [8,9]. As stated by Watts et al., it is therefore important to link climate change mitigation with explicit positive health benefits. The consideration of health co-benefits and co-harms in climate policy could lead to immediate and continual net benefits globally [10]. Research has suggested that the benefits of health gains alone could exceed the cost of implementing mitigation actions [11]. Despite the evidence linking climate change and health, the role of health in climate policy has been 'elusive', particularly in mitigation policies [12].

Since many climate and health policies focus on air pollution, it is relevant to mention the interlinkages between climate change and air quality. Poor air quality, which is caused by the same pollutants driving climate change, has deleterious effects on health: in 2019, 4 million premature deaths were attributed to exposure to ambient PM2.5 [13], and air pollution is linked to chronic respiratory and heart diseases, acute respiratory infections, bronchitis, and lung cancer [14]. The shift to renewable sources of energy driven by mitigation could lead to better air quality and significantly reduce air pollution deaths [15].

Evidence suggests that Spain will become warmer and drier due to climate change [16]. The Intergovernmental Panel on Climate Change (IPCC) stated in 2014 that "climate change is *very likely* to increase the frequency and intensity of heat waves, particularly "in Southern Europe" [17] (emphasis in original). Research estimated 6,500-8,600 additional deaths in Spain during the European 2003

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heatwaves [18]. In addition, climate change could favour the conditions for malaria transmission [19].

1.1. Climate change and health policies in Spain

In Spain, while no specific policy addresses health through a climate change lens, a public health assessment must accompany all policies [20]. Since 2018, the Ministry of Ecological Transition and the Demographic Challenge is tasked with developing climate change policy. A draft of the 'Health and Environment Plan', commissioned in 2007, was published in June 2021, after this analysis took place. In addition, the Observatory of Health and Climate Change, once in charge of the analysis and tracking of the effects of climate change on public health, was dissolved in 2014 due to expenditure cuts [21].

2. Materials and methods

2.1. Theoretical framework

The analytical focus of this study is problem representation. The theoretical framework 'What's the Problem Represented to be?' (WPR) allows to explore the representation of health and climate change in mitigation policies [22]. According to WPR, governance occurs through problematisations which, formed in policy documents, shape interventions, plans and strategies [22]. Hence, it is important to identify the ways in which issues are problematised in policies, think beyond assumed 'problems' and interrogate how issues are represented. The analysis focuses on the WPR questions most appropriate for the case study and methods selected:

- What is the 'problem' represented to be in a specific policy?
- What presuppositions and assumptions underlie this representation of the 'problem'?
- What is left unproblematic in this problem representation? Where are the silences? Can the 'problem' be thought about differently? [22]

2.1.1. Discourse analysis

Based on social constructivist theory, discourse analysis is grounded on the premise that there is no 'objective truth' and that people, including researchers, carry their own social baggage [23]. Discourse analysis involves the examination of 'socially produced forms of knowledge' and the ways in which those ideas are present in language [22,23]. In a WPR context, policies are elaborated in discourse [22]. Thus, discourse analysis is instrumental to "reveal underlying assumptions and preconceptions in problem representations, and to identify and reflect upon silences" [22].

2.2. Data collection and analysis

2.2.1. Policies

Four policy documents make up the 'National Strategic Energy and Climate Framework 2021-2030': the Climate Change and Energy Transition Law (CCETL) approved in May 2021 by the Congress, the National Energy and Climate Plan (NECP), its Impact Assessment (IA), and the Just Transition Strategy (JTS).[1] I consider all of these 'policy documents', as policy goes beyond laws and legislation [22]. Some of the documents dictate what is to be done, and others unveil the policy makers' position on climate change as well as complement the measures proposed in the binding documents.

In order to address the WPR question 'what's the problem represented to be?, I performed inductive analysis in NVivo12, a qualitative data analysis software that allows organising and coding texts. The coding process took place in September-October 2020 and it followed these steps:

- The first coding round focused on two labels: representation of health and representation of climate change. These were directly informed by the first WPR question outlined above, 'what's the problem represented to be?'. Through an interpretive analysis, I manually coded paragraphs, sentences and single words displaying the representation of health and the representation of climate change in the policies.
- Subsequently, a second and third round of coding identified three sub-labels, which nuanced the representation of climate change in the policies: (i) economic growth, (ii) the energy system and (iii) employment.

Once the texts were coded, the two remaining WPR questions 'what presuppositions and assumptions underlie this representation of the 'problem'? and 'what is left unproblematic in this problem representation?' guided the analysis of the coded policy excerpts.

2.2.2. Interviews

Four semi-structured interviews with climate change or health policy stakeholders allowed for a triangulation of the content documentary analysis. Ethics approval for the interviews was obtained from the University of Copenhagen's Research Ethics Committee for Science and Health on September 1st 2020. Purposive and snowball sampling served to identify potential informants. Out of 12 key stakeholders approached, four agreed to interview. All interviews were carried out online due to the COVID-19 pandemic.

The interviews were recorded and transcribed with the informants' consent. According to their field, they were pseudonymised as CC1, CC2 and CC3 (climate change) and PH1 (public health). At the time of interviews, CC1 worked at the Spanish Climate Change Office; CC2 at the Just Transition Institute; CC3 at the Ecological Transition Commission at the Congress. PH1 was a public health scholar who had previously worked at the Ministry of Health. The interview transcripts were analysed following the dynamic analysis approach, which allows for flexibility and changes, as the full analysis could not be planned beforehand [23]. In this approach, ideas 'emerge' as part of the analysis [23].

3. Results

3.1. Summary key of results

This analysis found that Spanish climate change mitigation policies represent the 'problem' of climate change to be one of economic growth, the energy system and employment. In terms of the representation of health, the policies represent health as the mortality reduction due to air quality improvement most prominently. Other health co-benefits of mitigation are virtually absent from the policies. In addition, the limited health focus in mitigation policies was justified by the inclusion of the health agenda to climate adaptation plans. Furthermore, a discrepancy between the ambition to engage with the health agenda across the policies and its actual limited inclusion in the mitigation documents was observed. These results are explored below, stratified by the three questions from the WPR framework articulated in Section 2.1.

3.2. What is the 'problem' represented to be in this specific policy?

The coding effort found that Spanish climate change mitigation policies represent the 'problem' of climate change to be one of energy systems, economic growth and employment. As observed in the coding process, the policies most frequently discuss economic growth

[1] All documents are available in the Spanish Government website as of January 2022.

and employment risks and opportunities tied to climate change. For example, in the Just Transition Strategy, 'transition' is defined as "the change in the economic system" (JTS, 3)[2]. Similarly, the law justifies the reduction of greenhouse gas emissions as this makes "economic sense" (CCETL, 12). In addition, the policies detail the labour dimension of climate change:

"The transition towards a more ecological productive model (...) will be achieved through the promotion of the ecological transition of companies, work methodologies and the labour market in general" (CCETL, 11).

According to these results, the economic and the employment agendas drive the policies more strongly than the health agenda.

In terms of the representation of health, the coding revealed that health is mostly mentioned in passing in the policies, with the exception of the IA, which will be discussed in Section 3.3. On the other hand, the interviewees conceptualised health as 'very important' for climate change mitigation. Thus, I observed a discrepancy between the ambition to comprehensively engage with health aspects and its actual limited inclusion in the policy documents. Informant CC1 articulated health as a climate adaptation 'problem', and acknowledged the divide between mitigation and adaptation:

"Health is presented more in-depth in the adaptation strategy. We [at the Climate Change Office] have drawn a line [between adaptation and mitigation]. It is an artificial line, but this is the way we are working".

This statement shows that adaptation is 'problematised' as a health issue by the policymaker, thus justifies the limited health component in the mitigation policies. In addition, this finding suggests that health is not regarded as a cross-cutting issue in the national climate policy context.

3.3. What presuppositions and assumptions underlie this representation of the 'problem'?

A number of presuppositions and assumptions underlie the representation of climate change as a 'problem' in the mitigation policies. Firstly, the policies revolve primarily around the national economy:

"Key sectors of our economy are closely dependent on the climate. But so are many other areas essential to our well-being, such as human health, biodiversity or housing" (CCETL, 10).

In addition, the policies' discourse assumes economic growth as desirable, and considers other gains an added benefit:

"The societal benefits of the green policies *go beyond growth and employment gains*. For example, the social benefit of preventing premature deaths due to air pollution should not be dismissed, thus the ecological transition policies *should also be considered in a broad costs and benefits frame*" (JTS, 9, emphasis added).

Thus, health is articulated as secondary in the policies. The use of "should also be considered" in the quote above points to the underlying assumption that preventing air pollution deaths is not automatically considered as a benefit of climate change mitigation. Furthermore, the inclusion of health under adaptation points to an underlying assumption that health is not a cross-cutting issue in the national climate policy context.

In addition, health is almost exclusively considered in relation to air pollution. The health impacts section of the IA is the only health-specific content in the documents analysed, and it concludes that the NECP will lead to "very positive health results" due to improved air quality by 2030 (IA, 12). However, the IA only examines the change in air quality associated with greenhouse gases emissions reduction. Thus, the policies assume health to be an air quality 'problem' in the mitigation policies.

[2] The policy texts are referenced as follows: (Document, page)

3.4. Where are the silences? Can the 'problem' be thought about differently?

This section focuses on what is missing in the policies. While the coding effort showed an integrated understanding of health and its interactions with other climate gains in some sections, this analysis identified significant gaps in the policies' representation of health. For example, the linkages between health and climate change mitigation are not thoroughly discussed. Furthermore, while energy poverty is examined in depth, its health dimension is absent. Despite public health supposedly being a "guiding principle" of the national climate change framework, this analysis found an inconsistent articulation of health in the policies.

In addition, I observed the absence of any other health co-benefits other than air quality improvement, such as "healthier diets, more active lives, and increased exposure to green space" [13]. Moreover, the health co-benefits of air quality are measured exclusively in terms of mortality rate reduction in the policies (IA, 17, 44, 66). Disease morbidity is not discussed in the policies. In addition, neither Disability-Adjusted Life Years (DALYs) nor Quality-Adjusted Life Years (QALYs) are utilised in the policies. Furthermore, a mental health gap was observed [24].

4. Discussion

The results presented above point to an inconsistency between the importance assigned to health by informants and its actual inclusion in policy documents. This reaffirms previous research showing the limited influence of health in climate change mitigation policies at the EU level [25]. Discrepancies between inter-sectoral health policy ambitions and the actual attainment of such goals have also been observed in the EU [26].

Such discordance illustrates that scientific evidence and moral arguments about health are not sufficient to achieve health-centric policy outcomes [27].

The analysis reveals that the policies identify climate change as an opportunity, enabling "a seductive narrative of maximised synergies" [28]. This reinforces a power dynamic in which the biggest polluters may carry out unsustainable consumption patterns at the expense of climate changes, with most harmful impacts in low- and middle-income countries [28,29].

In terms of health indicators, the type of evidence used in the policies bounds the way in which a 'problem' is represented [22]. Arguably, the mitigation policies show a narrow articulation of health.

Thus, climate change is hardly represented to be a health 'problem' in the selected policies. Health is deemed 'apolitical' and thus effectively excluded from the political programme beyond health policy [7]. However, health *could* have a prominent role in Spanish mitigation policies. In the United States of America, for example, the government pursued relatively ambitious mitigation measures with health as a 'core motivation' during the Obama Administration [30].

4.1. Comparison with previous work

The results resonate with prior work showing the 'elusive' role of public health concerns in climate policy [12]. The focus on air pollution speaks to findings on the emphasis on air pollution health co-benefits in the European Union [25]. In addition, the narrow articulation of health co-benefits in the policy documents ignores the 'substantial' health benefits associated with shifts in diets and food production systems [13]. Furthermore, the inconsistent inclusion of health concerns in the policies is in agreement with the idea that policy documents do not encompass a single coherent discourse, but a set of intrinsically conflicting narratives [22].

4.2. Limitations

Given the complementarity of the mitigation and adaptation realms, relevant connections between the two policy fields might have been obscured by a focus on mitigation. Moreover, some of the policy documents analysed were drafts at the time of writing, and might have been modified after publication. In addition, this analysis focuses on the content of the policies and a few stakeholders' perspectives, leaving out the context, process and many actors of the 'policy triangle', and not fully grasping the complexities of policy-making [31]. The small number of interviews is another limitation of this study. Further, as this is an interpretive discourse analysis, replicates of this study could lead to different interpretations of the texts, as my prior understandings shaped the coding process [32].

Finally, policy texts were coded in Spanish and interviews were carried out in Spanish. While I am a fluent speaker of both Spanish and English, translation imposes some degree of loss [23]. Indeed, as semantics studies meaning, language interpretation is at the core of discourse analysis. On the other hand, the original policy documents are available online, making it possible to corroborate the validity of my translations.

4.3. Implications

Based on these results, there is an opportunity for policy makers in Spain to more comprehensively include the health agenda in mitigation policies, and to consider health gains as key drivers of climate measures. Such representation should acknowledge the health impacts of poor climate change mitigation as well as the health benefits of mitigation policies beyond the reduction of air pollution-related deaths. It is crucial that policies include more health co-benefits of climate mitigation such as active mobility, mental health benefits and the reduction in transmission of infectious diseases, among others, and that they acknowledge the gender-differentiated impacts of climate change on health. For this, it is essential to collect gender-disaggregated data on the health impacts of climate change, as well as the health gains of climate mitigation measures. In addition, the inclusion of health indicators in national policies is recommended to gather an ample picture of the health implications of ambitious climate mitigation. For example, DALYs and QALYs could be included in the health impact assessments of mitigation policies in the future. Overall, implementing a "Health In All Policies" approach would benefit public health outcomes in a climate change context. Building on previous research [8,25] I argue that clearly linking health co-benefits with mitigation would advance health outcomes in Spain and elsewhere.

5. Conclusion

The discussion above shows the limited representation of health in Spanish mitigation policies. Based on the results, I argue that the policies pay lip service to health, as the importance of health is acknowledged, but the measures proposed in the policies are neither driven by nor target health goals. The results also showed a discrepancy between the ambition to make health an overarching priority and its limited consideration in policy documents, which is common in climate policy. Overall, through this analysis, I have shown that climate change is hardly represented to be a health 'problem' in the mitigation policies, and that other priorities like economic growth and employment are more prominent in the documents. Arguably, this simplistic representation of health might have implications beyond the climate change policy field, as policy discourse 'sticks' through the institutionalisation of such narratives. The narrow representation of health in the Spanish mitigation policies thus potentially limits the engagement with the health agenda in other policy areas. As climate change impacts on human health become visible and mitigation policy becomes increasingly imperative, the examination of the representation of health in the policies is particularly relevant. Further research studying the representation of health in climate policy in other countries would supplement these findings.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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