

The controversy over the restructuring of perinatal emergency services in Portugal and the importance of citizen participation in health care decision-making processes

A controvérsia sobre a reestruturação dos serviços de urgência perinatal em Portugal e a importância da participação cidadã em processos de decisão sobre saúde

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Abstract

This article explores the controversial decision made by the Ministry of Health to restructure the perinatal emergency services in Portugal in 2006. Particular emphasis is given to the protests held across the country against, the actors involved, and the arguments put forward for and against the measure, in an attempt to understand the forms of knowledge and experiences brought to the discussion about the issues raised by the decision, and how different forms of knowledge are reconciled under a democratic process. In addition, this article explores the importance of citizen participation, including that which emerges from conflicting relations, in the formulation of health policies.

Keywords: perinatal policies; health controversy; health policies; citizen participation; Portugal.

Resumo

O artigo examina o processo de reestruturação dos serviços de emergência perinatal implementado pelo Ministério da Saúde em Portugal em 2006 e tem como objetivo analisar essa decisão controversa. Especial ênfase é dada aos protestos desencadeados no país contra essa medida, os atores envolvidos e os argumentos contra e a favor, de forma a compreender os conhecimentos e as experiências trazidos para discussão dos problemas suscitados pela decisão tomada e como diferentes formas de conhecimento podem ser conciliadas no âmbito de procedimentos democráticos. Além disso, explora a relevância da participação cidadã na formulação de políticas de saúde, incluindo aquela que emerge de relações conflitantes.

Palavras-chave: política perinatal; controvérsia sobre saúde; políticas de saúde; participação cidadã; Portugal.

In recent decades, different approaches have emerged which emphasize not only the right of every citizen to participate in the policy-making process, but also the need to place values such as accountability, transparency and participation at the centre of decision-making processes. Within this analytical context, sociotechnical controversies constitute privileged spaces for the exploration of the opportunities for democratization afforded by decision-making processes.

Decision-making involves many different actors, each of which plays a different role depending on the specific form of knowledge he or she brings to the process. Three central questions emerge from this standpoint which deserve further analysis: (a) what forms of knowledge and experiences are brought to the discussion about the issues at stake; (b) how can different forms of knowledge be reconciled within democratic processes; (c) what is the importance of citizen participation, including that which emerges from a conflicting relationship between the state and civil society, in the formulation of health policies.

In attempting to answer these questions, I shall draw on the process which led to the Portuguese Ministry of Health's controversial decision to restructure the country's perinatal emergency services resulting in the closure of several maternity wards in 2006. This case study analysis used the following data collection techniques: semi-structured interviews with key informants; documentary analysis of reports, documents and relevant legislation; and the analysis of 497 news items selected from the *Diário de Notícias*, *Jornal de Notícias*, and *Expresso* newspapers.

This study was one of the cases studies explored by the author for her PhD thesis (Matos, 2012). Based on the information collected, two previous articles focusing on different approaches were published: one which describes the decision-making process and how citizen participation was dismissed, which is part of a special volume on maternal and child health policies in Portugal co-organized by the author (Matos, Costa, Araújo, 2011); and a second which focuses on the discussion of the theory of deliberative democracy in relation to protest actions (Matos, 2011).

The theoretical background to the discussion

Society is regulated by public policies, which in turn appear to remain regulated by scientific knowledge. This discourse exemplifies the mutual constitution of science and politics.

The emergence of science as the flagship of modern rationality went hand in hand with highly visible attacks by scientists and politicians on views seen by them as being based primarily on ignorance, superstition and ideological bias. Historically, scientists have tended to either ignore or debase other forms of knowledge through direct confrontation (Haraway, 1989; Harding, 1998). To this day, science often fails to acknowledge or plays down the value of other forms of knowledge (Visvanathan, 2006). When considering the possibilities for citizen participation in decision-making processes which involve scientific knowledge, either directly or indirectly, there is a strong tendency to assume and reproduce the supremacy of science over other forms of knowledge. Within this context, participation has been used as the missing piece that is needed to restore the relationship between science and society,

clearly raising the question of how different forms of knowledge come together in the process of decision-making.

Controversies associated with decision-making processes are privileged spaces where different forms of knowledge come into contact, and have been attracting growing interest since the 1970s (Nelkin, 1984). A controversy is defined here as a confrontation between positions on a particular issue or a decision in which each of the parts involved claim that the other is wrong and arrogate to themselves the most valid arguments. It frames conflicting relationships that last over time, maintaining the public, oral or written exchange of arguments and counter-arguments about a particular issue (Velho, Velho, 2002). However, it is the sociotechnical dimension of controversial decisions that raises particular interest (Engelhardt, Caplan, 1987). By mobilizing and antagonizing distinct social groups, sociotechnical controversies involving science and technology induce the emergence of public participation as a central issue and reveal the political culture out of which controversies arise (Jasanoff, 2007).

A possible path to overcoming conflicts between different forms of knowledge in situations like controversies lies in introducing a new political conception of decision-making which is free of “prostheses” and involves the constitution of “hybrid forums”, allowing the emergence of new configurations of knowledge. Under this approach, the decision-making process is inclusive in terms of the concerns of those affected by the problem – the concerned groups – who work together in collaborative experiments (Callon, Lascoumes, Barthe, 2001). It also defines a new direction for the engagement between knowledge production and citizenship, namely on the basis of the co-production of new forms of knowledge (Jasanoff, 2004).

This conception of citizen participation, in which citizens’ knowledge is taken into account in the decision-making process, appears to be equivalent, in part, to the model of political organization also recognized as “high-intensity” democracy (Santos, 2002). Nevertheless, tensions and gaps exist between the theoretical openness of the process and participation in practice, namely because not all forms of participation are democratic, and nor do they ensure that decision-making takes into account the knowledge of the parts affected by the measures.

The question of risk is central to the scientific knowledge, participation and democracy triangle and is the main rationale behind citizen participation in decision-making. Accordingly, it is argued that risk and the proliferation of uncertainty are recognized as the defining features of life, politics and markets in knowledge societies as we know them today (Beck, 1992). Risk may therefore induce and fuel the emergence of public controversies involving scientific knowledge. It not only increases the fears of those potentially affected by different kind of risks, but – depending on the relationship between the political system and civic participation – is also responsible for the increase in the public response to the social perception of risk, and the way it is framed by public decisions, in the form of protest actions (Gonçalves et al., 2007).

The concept of social vulnerability, or vulnerable social zone, was recently co-opted by this particular area of risk analysis. According to this concept, those social groups most exposed to risk situations – the most vulnerable – should participate more in debates and decision-making processes which address these issues (Porto, 2007). In this sense, risk is seen as directly affecting peoples’ lives and poses new problems which demands new decisions and the active participation of those affected.

Given the authority attributed to science and associated expertise by contemporary society and culture, the deeply embedded suspicion that science cannot fully deal with ethical and existential questions, and moreover, the current controversies intensely fueled by present day developments in science and technology, an exploration of the various – though often indirect – roles of science and technology in decision-making processes, and their relation to other forms of knowledge is required to address not only issues of inequality, but also issues such as risk and uncertainty, which definitely pose new challenges for citizen participation. In its diverse forms, participation is, therefore, a channel which is capable of bringing different forms of knowledge into direct contact, potentially creating the conditions to solutions based on plurality of knowledge.

Maternal and child health policies in Portugal before 2006

State provided maternal and child health care in Portugal was limited up the 1970s when the government acknowledged responsibility for health policy and implementation, taking a number of important actions which included universal access to healthcare and investment in primary care through the creation of a national network of health centers (decree-law 417/71). The decree-law acknowledged the importance of primary healthcare and identified maternal and child health as a priority within the system.

In 1979, the law 56/79 established the National Health Service (*Serviço Nacional de Saúde*) which encompassed maternal and child health. By the early 1980s, pediatric intensive care units were introduced in state hospitals, and more recently, in 1989, the National Program for Maternal and Child Health (*Programa Nacional de Saúde Materna e Infantil*) was implemented, which involved the first restructuring of maternity services. Therefore, the 2006 maternal and child health services reform explored by this article was not the first of its kind in Portugal. Its most important predecessor was the package of changes implemented in 1989, which also included the creation of the National Committee for Maternal and Neonatal Health (*Comissão Nacional de Saúde Materno e Neonatal, CNSMN*), which was responsible for implementing key changes that strongly affected the quality of maternity and newborn care: hospital ranking, differentiated perinatal support, maternal and child unit referral networks, coordination of professional units, introduction of the mandatory pregnancy health record, and the concentration of births in units offering better facilities. This reform led to the closure of around 150 of the two hundred maternity wards, i.e., 75% of existing services.

After 1989, attempts were made to create larger maternity units based on the assumption that the quality and success of services depended on the number of deliveries and the amount of interventions in high-risk deliveries performed at the facility each year. A further assessment of these services was undertaken in 2004. The report forwarded to the Health minister supported the need to adopt measures to improve maternal and child health services, advocating the concentration of births in larger health units in order to provide safer and higher quality services. However, the minister chose not to implement the reports suggestions at that time.

Later, however, a group of experts from the CNSMN reaffirmed the conclusions of the previous assessments, reiterating their recommendations in a new report (Portugal, 2006).

This time, the then Health minister decided to implement the recommendations regarding concentration of births in larger health units. This decision was taken on March 14, just four days after receiving the report when the minister signed the ministerial directive no.7495/2006 providing for the closure of maternity wards which performed less than 1,500 births per year and the concentration of births in larger units. The ministerial directive stated that the provision of efficient care in facilities that met technical and human resource requirements could only be guaranteed in hospitals which performed at least 1,500 deliveries per year. According to the directive, this number meant that health professionals would have the necessary experience to deal with rare situations. In addition, directive stated that the human and technical resources of these health units should include the permanent presence of at least two obstetricians, a neonatologist, a pediatrician and an anesthesiologist.

This measure was also intended to achieve other objectives, such as reducing Portugal's cesarean section rates, which is among the highest in Europe. However, although the Portuguese government never admitted it, the real motives behind the restructuring, and also mentioned by the group of experts' report, were economic.

Twenty-seven of the fifty maternity wards which were functioning at the time fulfilled the 1,500 births/year threshold. Of the 23 which failed to meet the criteria, 15 performed less than 1,200 births/year, 12 less than 1,000 births/year, and five less than 500 births/year. According to the ministerial directive, the decision was justified based on an assessment of the conditions of each maternity ward. However, the Health minister ended up closing only nine maternity wards showing that the 1,500 births/year criterion was not strictly followed.

The reasons behind the closure of maternity wards in Portugal

Infant and neonatal mortality rates are key indicators of prenatal and infant health performance. As in most Western countries, considerable advances have been made in reducing these rates in Portugal. During the controversy explored by this study, frequent references were made by individuals involved in previous interventions and their effects on infant and neonatal mortality. Although certain indicators were mentioned as being decisive, the key indicator in both CNSMN assessment and the ministry decision was the infant mortality rate over the past few decades. However, we must not ignore the importance of other indicators in order to obtain a more comprehensive characterization of childbirth conditions in Portugal, including infant,¹ perinatal,² and neonatal mortality.³

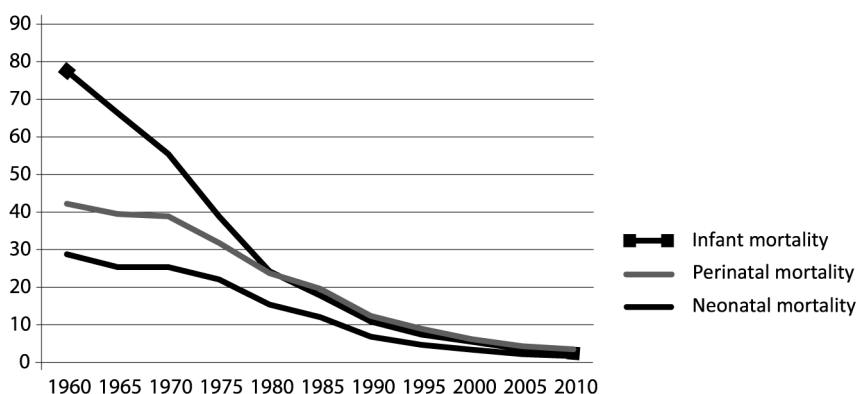
The infant mortality rate is a particularly important indicator used to frame major improvements in maternity and child health in Portugal, and moved the country from one of the last places in the world ranking, putting it among the ten countries with the lowest child mortality rates (Unicef, 2007; WHO, 2011), with a current rate of 2.4/1,000 live births.

Between 1990 and 2010, Portugal reduced its infant mortality rate from 10.9 to 2.4/1,000 live births. A thousand children died in 1990, while in 2010, the number of children who died in the first year of their life was around 426, of which 191 died in the first week after birth and 286 before reaching 1 month of age.

Five factors were responsible for these improvements: (1) the creation of the Instituto Maternal in 1940, which provided pediatric and gynecological care, services first introduced

in Lisbon and then expanded to the rest of the country; (2) the implementation of a National Vaccination Plan (Programa Nacional de Vacinação) in 1965 and a general improvement in living conditions (food, hygiene, and housing conditions); (3) the development of prophylactic and therapeutic treatment methods, especially the use of antibiotics, as from 1940; (4) improvements in the National Health System through the creation of specialized child and maternal healthcare services over the past few decades; (5) an increase in the level of education of the population, and particularly, the reduction in illiteracy among women, which is one of the risk factors for infant morbidity and mortality (Remoaldo, 2005).

Graph1: Infant, perinatal and neonatal mortality rates, 1965-2010



Source: Graph elaborated by the author, based on information from Instituto Nacional de Estatística and Base de Dados de Portugal Contemporâneo, Pordata

The improvements outlined above have been accompanied by an undeniable expansion of scientific and technological capabilities, allied to a growing awareness of the importance of effective public health measures. The scientific and technological advances in obstetrics, pediatrics, and in neonatology over the last century also made a significant contribution to the decline in mortality rates. Therefore, the improvement of the socioeconomic status, scientific and technological development, and general improvements in the quality of health care in Portugal, particularly in obstetrics and pediatrics, are key factors in the continuous fall in mortality rates, especially those associated with childbirth and child and maternal health.

The above indicators are key performance indicators for the assessment of the impact of public policies. The leading indicator used to justify the political decision in question was the infant mortality rate, as the ministerial directive makes clear. However, the indicator most likely to be affected by the closure of maternity wards was the perinatal mortality rate. Apart from being an indicator of the quality of antenatal and perinatal care, this rate can also be used to explore the risk factors associated with perinatal mortality and show how differences in registration procedures and practices influence the mortality data published by individual countries (Richardus et al.,1998).

It is also important to consider more closely the distribution of health care by geographical region. In fact, geographical inequalities seem to have been somewhat neglected in this decision-making process. To tailor the different types of care provision to people's needs

it is important to integrate information regarding spatial aspects (Santana, 2005). Such geographical differences make “territory” a privileged space for political action and analysis.

The geography of health field has devoted considerable attention to the issue of territorial inequalities, particularly in relation to economic development and urbanization. It is often believed that widespread accessible health care is associated with economic development; however, the relationship is not that simple (Nogueira, Remoaldo, 2010). Although Portugal has experienced general improvements in health care in line with economic development, it is true to say that these improvements have not occurred evenly across all regions and population groups. Moreover, in the past twenty years, the country has experienced major health policy discontinuity. These changes are not limited to normal electoral cycles, but often occur with ministerial changes within the same government. This discontinuity reflects the challenges associated with implementing health reforms in Portugal, especially the need to create national and regional healthcare networks to ensure integrated access to healthcare.

In this case study, the CMSMN based its suggestions on geographical indicators such as access to health services (despite the reaction of those who were against the measure because they considered that this relationship was not properly taken into account). However, the committee failed to deem territorial inequalities in culture, income and education. The relationships between these factors in the context of health care in Portugal “remain poorly understood.” The recommendations related to distance/proximity of health services made by the CNSMN did not take other factors into consideration, such as the impact of weather conditions on travelling times.

The importance of acknowledging the spatial dimensions of population groups and their health problems and needs is central to public policymaking and should not be underestimated. Territory constitutes more than a simple political and operational space of public policy, including health policy; it is where the interaction between population and health services happens. A given territory is inhabited by a population with given sociodemographic characteristics and a specific socioepidemiologic profile which are associated with specific health problems and needs (Nogueira, Remoaldo, 2010). Neglecting the spatial aspects of health and healthcare provision increases the risk of generating inequalities in the access to effective healthcare.

The years following the creation of the National Health System after the 1974 democratic revolution saw a continuous increase in investment in public health. However, since 2005, this investment has shown signs of slowing down. The new trend in spending cuts coincided with the restructuring of maternal and child health services.

A government which seeks to improve health performance based on the above key indicators, and reap the associated benefits, should expand services to provide support to mothers and infants. But this raises the following questions: what type of facilities should be created; what is the optimal size of facilities; and where should they be located. The discussion of these questions needs to draw on more than aggregate national statistical data, and goes beyond the assessment of allegedly technical matters into realm of political debate. Governments tend to try to stick to what they define as solid, technical and evidence-based arguments. The boundaries between hard evidence and mere opinion, sometimes dismissed

as “politics”, are less straightforward and more blurred than suggested. This is especially the case in the debate about minimum size and location which offsets what amounts to politics of space, where technical and political elements, the center versus periphery, and social class and regional identity, come into play. Obviously, and as this controversy shows, the politics of participation and the politics of space intersect in such situations and open the democratic principles at stake up to scrutiny.

The eruption of the controversy in March 2006

Criticism and suspicion of the measures were voiced soon after the ministerial decision in 2006. The first announcement of the decision to close wards was made by the Health minister to the Parliamentary Commission on Health, and on the very same day he signed the ministerial directive (March 14). It is unclear whether he discussed his plans with the CNSMN beforehand; in fact, the committee later complained to the media that the minister had adopted only one of their report’s recommendations. Two days later, on March 16, Portugal’s left wing parties questioned the Health minister on the issue during parliamentary debate. The newspapers reported that it was a very weak debate, mainly due to the fact that the decision had been already made. From this moment on, further public debate on the issue did not take place. The minister was questioned again about his decision during parliamentary debates on health, but to no effect.

Further controversy over the closures was ignited by a study conducted by the Escola Nacional de Saúde Pública (Costa, Lopes, 2007) which assessed the fifty public maternity wards based on several key health indicators, including number of caesarean sections performed, postpartum complications, and mortality. The assessment was based on data collected during the period 2000 to 2004, but did not cross-reference the results with the number of births in each health unit. The study’s findings, which were based on the results achieved by the maternity wards, and not the conditions of each individual unit, contradicted those of the NCMNH, showing that the mortality and postpartum complications rates in the maternity wards listed for closure were not among the highest of the fifty wards assessed by the study.

This study was forwarded to the General Health Directorate of the Portuguese Ministry of Health in May 2006, when the closure process had already started, and its findings therefore had no impact on the decision. However, before the decision had been taken, the Health Regulation Authority had also defended the need to undertake further technical studies to provide sound evidence on which to base the decision. Not only was the credibility of the CNSMN evaluation at stake, but also which criteria should be developed and applied in deciding which wards to close.

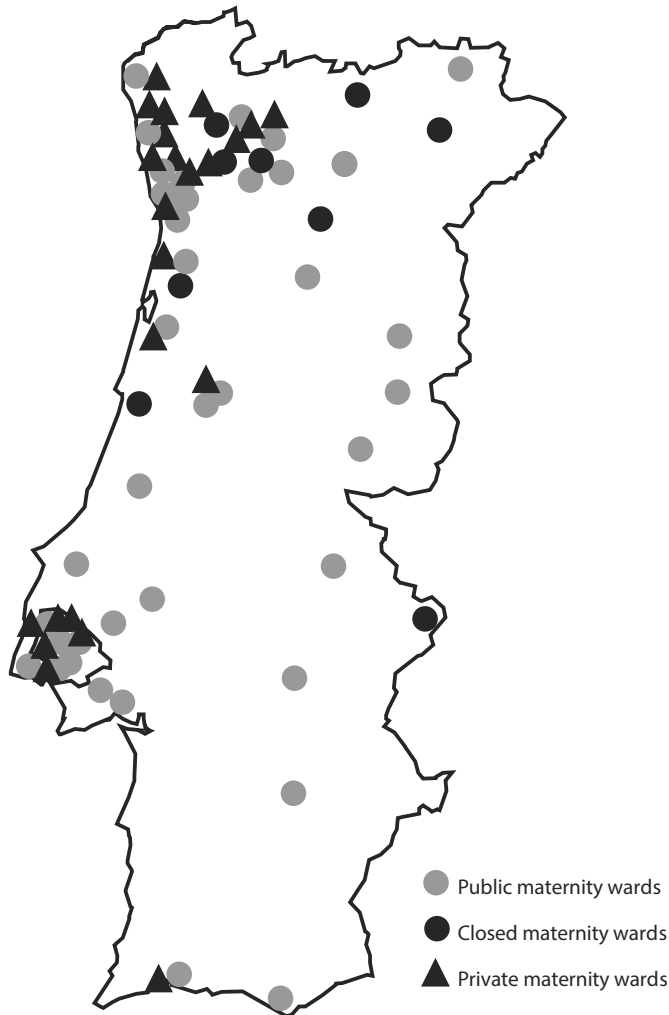
The closure of maternity wards

A number of political decisions taken during the closure process contradicted the proposals put forward by the group of experts (obstetricians, pediatricians, neonatologists and obstetric nurses) based on technical arguments, and maternity wards marked by the report for closure remain open to this day. To a certain extent, the government ended up disregarding its own

1,500 births/year safety and quality threshold when certain maternity wards that performed fewer than 1,500 births/year were not closed.

A number of other contradictions also emerged, one of which concerns the argument put forward by the government that the decisions were taken to give Portuguese women the freedom to choose the services they saw fit, meaning they would be in a position to choose health units recognized as providing safe and high quality health care. In reality, this would erode the demand for other supposedly inferior health units and explains why some units performed under 750 births/year. Thus, the government effectively legitimized “better options” made by “well-informed” women closing the units with less demand, and disregarding the difficulties in accessing the “best units” in doing so. The ministerial directive was self-contradictory since it defended freedom of choice for mothers while imposing the birth concentration in larger units.

Map 1: Distribution of maternity wards in Portugal



Source: Composed by the author

As can be seen in Map 1, the closure of maternity wards negatively affected the inland population, aggravating inequalities such as access to services related to proximity to healthcare units. The measure dramatically increased travel distances for some pregnant women. In some inland regions of the country, pregnant women live up to 90km from the nearest maternity ward entailing a travel time of over one hour, while women living on the coast benefit from a higher concentration of services and therefore greater choice of both public and private services.

The Portuguese Observatory of Health Systems (Observatório Português dos Sistemas de Saúde, OPSS) drew attention to a point neglected during the process related to the effect ward closures has on depopulation and ageing in rural areas. The Observatory regarded the decision as an *ad hoc* measure which revealed a “lack of governance”, and argued that “the Portuguese cannot be treated differently or discriminated against just because they live in certain geographic areas” (OPSS, 2006).

Why did the decision lead to protests?

At this point, we take a look at the actions of a diverse range of social actors who transformed the closure of maternity wards into one of the most controversial political decisions in the Portuguese health sector in the 2000s. According to some interviews, the controversy arose mainly due the lack of public participation in the decision-making process:

Each Portuguese citizen has among his central rights the right to indignation and to protest. What happened due to the closure of maternity wards ... is something very characteristic of this government: a deep ignorance of reality, of what people really want. A highly disrespectful attitude towards population and its will (Queiroz, 27 Feb. 2009).⁴

In addition, those who felt affected by the decision to close the wards claimed that there was no room for dialogue, even before the decision became known.

Local citizens and their political representatives did not understand the reasons why they were not informed about the measure and lamented that they only became aware of the decision through the media. Most of the actors against the resolution felt that they were given no opportunity to engage in dialogue with the decision-makers and present their arguments. The protests were regarded as an appropriate way to attempt to reverse the decision:

I just regret that the president of the Health Administration has come to tell me the date on which the maternity ward will be closed, he did not even have the dignity to discuss the real reasons of the closure with us. He merely said what we had already read about in the technical report. This process is anything but transparent (Pires, 11 Sept. 2006).⁵

Although citizen mobilization occurred when the decision was still a matter of speculation, the controversy only began to take real shape after the publication of the ministerial directive.

During the months after the ministerial directive became public, local populations started to launch protests timed closely in line with the ward closure schedule. The main argument of the protesters was the 1,500 births/year closure threshold. For the experts of the CNSMN, the criterion was an internationally accepted threshold endorsed by the World Health

Organization. However, efforts made to confirm this information were unsuccessful and only led to the appearance of contradictory information. For instance, a scientific article entitled “Does size matter? A population-based study of birth in low-volume maternity hospitals for low risk women” (Tracy et al., 2006) concluded that the number of neonatal deaths were lower in low-volume hospitals (between hundred and five hundred deliveries per year) than in hospitals which performed over 2,000 deliveries per year. In 2003, in France, the then Health minister, Jean-Francois Mattei, established a closure threshold of 1,000 births/year based on the same general arguments put forward by CNSMN’s assessment report. This suggested the flexible use of this indicator depending on the context and the aims of those who were using it. These examples undermined the credibility of the 1,500 births/year closure threshold, which was central to the government’s argument. According to a member of the CNSMN:

Only in hospitals that perform about 1,500 deliveries per year can people be born safely. This is not a magic number; it’s an internationally accepted consensual average which allows professionals to deliver a sufficient number of children in order to face rare situations that sometimes happen, and to be prepared to solve them so that nothing happens to women or newborns (Moura, 26 Jun. 2009).⁶

Those against the measure

Members of the population living in the locations affected by the closure plan were key actors in this controversy. However, it should be noted that their mobilization was partly driven by local branches of opposing political parties, and in certain cases mayors spoke on behalf of the population and even led the protests. In other cases, political opposition made its presence felt as party leader she added movements created to combat the decision.

Although some health professionals, especially obstetricians working in the maternity wards that were marked for closure, joined the protests, their visibility was limited. The main concern expressed by these professionals related to the end of certain obstetric tasks which they performed prior to closure, including deliveries of newborns. In addition, these professionals complained that their voices were not heard during the process and that the minister and the experts responsible for the assessment never visited their units:

The future of the professionals of the closed units has not been safeguarded, and that bothers and disturbs a lot. For now, the only thing we know is that we have to work a 12 hour emergency shift in another health unit. We have many misgivings regarding our future (Silva, 1 Jun. 2006).⁷

Although they did not express an official position, some general practitioners⁸ stated that they disagreed with the measure and feared that it would lead to an increase in the number of pregnancies monitored by them in health centers. Lack of specific training, especially in dealing with high-risk pregnancies, was the main argument raised by general practitioners against the measure, reinforcing criticisms of inadequate planning and response of the health services to the care demands of pregnant women. These arguments, together with the financial difficulties experienced by the population in accessing private health services, pointed to new challenges for the politics of childbirth in Portugal.

Local fire brigades, partially responsible for emergency patient transport, also proved to be against the measure, fearing negative consequences due to its poor implementation. Representatives of local patient transport services claimed lack of planning and lack of involvement in the implementation of the directive:

I heard about the closure of the local maternity ward... As a commander, I was never informed. I just heard about it! The hospital, Inem (National Institute for Medical Emergency) and ARS (Regional Health Authority) didn't inform me of the planned closure process. ... At the beginning, the Codu (Centre of Guidance for Urgent Patients) also didn't know that the emergency service could not transport women in labor... Well, during the first few months it was a real mess! We arrived at the hospital with the pregnant woman and the emergency services would just send us away. ... In practice, those responsible for implementing the changes were at fault, because nobody advised us (Moreira, 9 Mar. 2010).⁹

The fact that no one had informed the emergency patient transport services (Inem/Corporate Fire Services) of the planned changes emerged as one of the protesters' major grievances, together with lacking and poorly equipped emergency vehicles, and the non-implementation of the provisions relating to the monitoring of pregnant women by specialized professionals.

What was at stake during the controversy?

Technical arguments play an important role in controversies and a range of arguments against the decision were put forward by protesters. In this respect, it should be remembered that the closures were one of the phases of a restructuring process that started much earlier, in 1989. The dispute of 2006 had less to do with a "war of numbers" and more to do with the way the decision was implemented and the outright dismissal of the demands and arguments of citizens and municipalities by the government.

During the 2006 and 2007 protests, opponents of the measure objected to the adoption of "purely economic criteria," accusing the government of using "terror tactics" and emphasizing that the arguments against closure outweighed those in favor. The technical argument used to defend the 1,500 births/year threshold was also the target of counter arguments: "A hospital in the center of Lisbon performs 2,000 to 2,500 deliveries per year, but has 50 obstetricians. Another, on the outskirts, performs only 1,000, but has seven or eight (obstetricians): who has more training?" (Neves, 16 Mar. 2006).¹⁰

One of the clearest cross-cutting issues, with potentially serious consequences for the whole country, was the depopulation of rural areas and the protests proved to be yet another popular cry against policies that discriminated against the population of certain regions in Portugal. Protesters argued that increasing demographic concentration in coastal regions was not counteracted by policies to avoid depopulation in rural areas. The trend of decisions to close public services in rural areas over the past decades, based on expert assessments, has led to further migration, depopulation and ageing in communities. This is arguably a circular problem resulting from a centralizing vision which advocates rationalizing government expenditure allegedly justified on the grounds of population concentration: investment in

inland regions of Portugal has been decreasing as the population decreases and people move to coastal areas or abroad.

The protests therefore represented an attempt to put a break on the “desertification of the countryside.” People opposed to the measure showed a genuine concern about the implications of the closures for public health and it can be said that they acted in accordance with a version of the precautionary principle: “let us be heard before they make things even worse.” These arguments, based on the territorialization of rights and inequalities, were fiercely defended by citizens and their political representatives during this process. One of the most common demands was the proximity of public services to the population.

Other arguments associated with the neglect of demographic and regional concerns related to the geographical variations in birth rates and socioeconomic status. Portugal has one of the lowest birth rates in the world. Closing maternity wards was both a consequence and stimulus of this trend.

Another issue at stake was the lack of transparency and consultation during the decision-making process. Transparency is defined here as the openness of public decision-making procedures to citizens’ participation and the presentation of arguments and concerns that have a bearing on the possible outcome. Transparency is therefore associated with citizen engagement and mutual responsibility between citizens and political representatives concerning both the substantive and procedural aspects of policymaking. As far as substantive arguments are concerned, it relates to the ways in which various forms of knowledge, expertise and experience are considered and how they enter into the overall equation. It also relates to issues of inclusion and exclusion of people, values and considerations. The encompassing nature of “lack of transparency” in political practice and social mobilization means it is nearly always a “ready-to-hand” argument for social mobilization in order to intervene in processes and object to proposals.

Another issue related to the lack of participation in this process concerns giving undue weight to technical arguments in detriment to other factors that could have influenced the quality of the decisions: “When we give birth to a child, we need a lot of family support and care. Now it is very complicated for our family to visit us. We’re there alone.”¹¹

During parliamentary discussions, the Health minister argued that, according to the imperatives of representative democracy, he was “the captain” and they, the members of parliament representing citizens, were “the passengers.” One would assume that this does not do away with the need to address the concerns and demands of the passengers. However, when political expertise takes the form of authoritative discourse, concerned citizens’ questions are often simply ignored rather than addressed (Callon, Lascoumes, Barthe, 2001).

Lack of planning of the closures and its consequences were also major concerns. After the closures were implemented, the media started to report increases in the number of births during transport of pregnant women from home to hospital. Although the reports turned out to be inaccurate, they served to reinforce the claims of poor management. What did happen during the transition however was that ambulances often went to maternity wards which had already closed, causing upheaval, a general impression of poor management, and a temporary increase in the number of births in ambulances during this period. The Portuguese Association for Emergency Assistance sparked a new controversy in relation to

this particular issue, by complaining about the total lack of planning and highlighting the non-implementation of the improvements to transport provided by the ministerial directive.

In a report on the new situation, the Portuguese Association for Emergency Assistance stated that the closure of maternity wards without ensuring the existence of an effective support network endangered the lives of mothers and newborns. The same document raised the following critical issues: (1) ambulances should only provide prehospital emergency care; (2) the number of ambulances failed to meet legal requirements; (3) most ambulances were not equipped to deal with childbirth; (4) medical teams were not qualified to replace specialist obstetricians; (5) high-risk situations (high-risk delivery, fetal distress, resuscitation of the newborn) required highly qualified medical professionals.

Another major issue was the presence of qualified staff during transport and the distances to the remaining maternity wards. The ministerial directive stated that transport should be provided by qualified professionals. The College of Nurses (*Ordem dos Enfermeiros*) formally expressed their concerns (*Ordem...*, 2008) about certain aspects of the process which had not been adequately dealt with by the government, claiming that there were not enough professionals to meet this requirement, emphasizing the need for timely transport, and contesting the idea that ambulance crews were adequately trained to provide health care to pregnant woman and newborns, despite the investment made in training since 2004.

Besides the public maternity wards, Portugal has 28 private units which comprise an essential component of the health care system. However, the criteria used to assess quality of care provided by these units were different to those used for the public service assessment, causing even further controversy. Opposition parties argued that private services should be evaluated in the same way as the public services. A report from the Health Regulation Entity (*Entidade Reguladora da Saúde*) (Portugal, 2007) which assessed the 28 private units, publicized during the period in question, raised the alarm that only two facilities achieved the 1,500 births/year threshold. The average rate in the other units was 150 births/year, or around 10% of the threshold imposed for the closure of public units. Given the central importance attributed to this threshold by the expert committee and the government, opponents wondered what this situation might imply in terms of quality. Remarkably, it turned out that new private units were opened in three of the regions where public wards had been closed, revealing a trend to promote private health care delivery, apparently even when service quality is below the standards set by the government for public wards.

The complex relationship between different forms of knowledge

Controversies allow us to make up an inventory of the relevant actors involved in a given process and identify the possible connections between the issues under discussion and other problems that certain groups are striving to make visible. But they also lead to the emergence of new actors and the establishment of often unexpected relationships between those involved (Callon, Lascoumes, Barthe, 2001). Each actor is associated with a certain form of knowledge that relates to others through dialogue, debate or negotiation.

During a controversy, oppositional knowledge can take on different forms, including those associated with opposition to the decision, regardless of whether it is expert or lay

knowledge. Woehrlé, Coy and Maney (2008) identify four forms of oppositional knowledge: (1) counter-informative (provides the “untold story”); (2) critical-interpretive (raises questions of meaning); (3) radical-envisioning (considers and explores alternative pathways); and (4) transformative (describes how alternatives may be achieved).

Oppositional actors who play a central role in the controversy may fit into the above categories. Civic movements, local populations and the mayors of the affected localities, for example, are associated with arguments which shape forms (3) and (4). The counter expert report drafted by the Escola Nacional de Saúde Pública, based on an assessment of the situation and drawing on several indicators allegedly neglected by the CNSMN, fits into form (1).

Oppositional knowledge also cultivates “critical thinking” skills in those who possess it (Woehrlé et al., 2008, p.234). In this case, expert knowledge was indeed privileged over other knowledge. Nevertheless, the decision made in this case led to the emergence of new configurations of knowledge in line with the recognized potentialities of the controversy, which is not just a convenient way of sharing information, or a mere battle of ideas, but a process which involves the constitution of “hybrid forums in which new exploration and learning processes emerge” (Callon, Lascoumes, Barthe, 2001, p.50).

Given the increased probability of births during transport of pregnant women to neighboring health units, some fire brigades invested in training personnel, largely based on self-study. It is also important to mention that some obstetricians working at the units prior to closure saw a reduction in their scope of practice and clinical activities as they performed fewer deliveries.

Certain indicators also provide an insight into the complexities surrounding knowledge relationships at childbirth (Table 1).

Table 1: Number of births in Portugal by location, 2003 to 2011

	2003	2005	2008	2011
Home	671	568	844	719
Hospital	104,453	101,746	96,064	89,654
Other	177	109	1,050	211
Total	105,301	102,423	97,958	90,584

Source: Elaborated by the author, based on health statistics from Instituto Nacional de Estatística

Despite a general decrease in the total number of births during the period in question, in line with a decrease in the national birth rate, it is clear that the number of home and “other” locations¹² increases. It is possible that these statistics reflect women’s choice, rather than situational eventualities, pointing towards “a new birth paradigm.” Assuming this is the case, this situation requires the presence of new actors in these spaces who have specific knowledge and training in childbirth, such as midwives.

The coincidence between this extraordinary increase of “other” births and the closure of maternity wards is particularly relevant to any eventual analysis of this measure to assess not only its direct consequences, but also its effects in relation to other dynamics regarding choice of place and method of childbirth among Portuguese women.

Final considerations

This work gave an account of a health controversy which stemmed from a decision to close maternity wards made by the Portuguese Health minister based on scientific and technical evidence largely provided by a group of experts appointed to carry out an assessment of maternal and child health. Despite a number of suggestions contained in the resulting assessment report, the Portuguese government neglected much of the advice and decided to close nine maternity wards without informing or consulting the respective local authorities and populations, sparking controversy compounded by the specificities which emerged in the facilities and regions affected by the decision. This analysis provided a deeper insight into how various forms of knowledge flowed together during the controversy and through the protests, where participation is seen as a form of conflict, despite the government's dismissal of any form of citizen participation before, during or after decision-making.

Despite being acknowledged as a legal form of public participation, policy makers do not "give due weight" to protests as a valid form of participation in decision-making processes. Although the protests were generally unsuccessful, they led the government to consider the problems raised and make certain modifications. The fact that the results of the protests are equivalent to an extensive consultation with the population cannot be ignored: after being totally excluded from the decision-making process, citizens managed to put this issue on the political agenda, highlighting the diversity of knowledge and experience surrounding the problem at hand.

Protests were used as a strategy to try to influence the decision, not only by demonstrating dissatisfaction with the measure, but also through proposing counter arguments. These actions constituted privileged spaces for demonstrating citizens' ability to control and monitor democracy. A more democratic decision-making process rests on the articulation of different forms of knowledge based on a co-production model which implies co-responsibility between the state and civil society in policy making. Decisions made under this model are based on mutually intelligible knowledge networks which improve the quality of decisions. A plural participation platform is therefore essential to achieve a genuine dialogue between different forms of knowledge in decision-making processes.

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NOTES

¹ Number of deaths of children aged under one year per 1,000 live births.

² Number of fetal deaths at 28 weeks of gestation or more and deaths within the first seven days after birth per 1,000 live births.

³ Number of deaths within 28 days after birth per 1,000 births.

⁴ Interview with the leader of the civic movement "Nascer na Figueira." In this and other citations of texts from non-English languages, a free translation has been provided.

⁵ Interview with José Silvano, a mayor of an affected region (Mirandela).

⁶ Interview with a member of the CNSMN.

⁷ Statements made by Mafalda Silva, obstetrician of the Oliveira de Azeméis Maternity Ward.

⁸ General practitioners are designated by the Portuguese Health National System to provide primary health care for all family members.

⁹ Interview with the commander of the Fire Brigade of Figueira da Foz, responsible for the service of urgent patients.

¹⁰ Statements made by the president of the National Federation of Physicians (Federação Nacional dos Médicos).

¹¹ Interview with a woman from an affected region. The interviewed did not consent the conversation recording, instead, notes and passages of the conversation were written in a notebook of the PhD fieldwork. Interviewer, Ana Raquel Matos. 18 May 2009.

¹² The attempt to clarify what counts as “other” locations with the National Statistical Institute (Instituto Nacional de Estatística, INE) resulted in the following clarification: “this information is based on birth statistics and involves the clearance of live and still births. Data is collected using an input document of the live or fetal still birth. The variable ‘Local delivery’ used in the methodology has not changed in recent years and has three response options: (1) Home; (2) Hospital/Clinic; (3) Other (not specified).”

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