Logiques de non-recours au vaccin contre la COVID-19 chez les professionnels.les infirmiers.ères travaillant dans des institutions de soins en Suisse romande

Rachel Démolis, Valentine Mach-Perrot, Gina Sobral, Songül Yavavli, Adélia Gschwend et Kétia Alexandre
Haute École de Santé Vaud (HESAV), Haute École spécialisée de Suisse occidentale (HES-SO), Lausanne, Suisse

Introduction

La vaccination contre le coronavirus est une stratégie fondamentale de lutte contre la pandémie de la COVID-19, tant en Suisse que sur le plan international. Les infirmier.ère.s sont parmi les premier.ère.s soignant.e.s au contact de la population qui implémentent cette stratégie, par le geste vaccinal, mais aussi par l'enseignement dispensé lors des consultations auprès des patient.e.s vaccino-hésitant.e.s. Contrairement à d'autres pays, la Suisse n'a pas instauré d'obligation vaccinale et les recensements sur la question ont montré qu'un nombre considérable d'infirmier.ère.s n'avaient pas l'intention de se faire vacciner.

Objectifs: Identifier les logiques de non-recours au vaccin contre la COVID-19 chez les professionnel.le.s infirmier.ère.s travaillant dans des institutions de soins en Suisse romande, en particulier les logiques individuelles d'hésitation vaccinale et les facteurs méso et macrosociaux favorisant l'hésitation et le refus vaccinal.

Méthode

Dans le cadre d'une recherche socio-anthropologique en cours (avril 2022 à octobre 2023), des entretiens semi-directifs en face-à-face ont été conduits auprès de 25 infirmier.ère.s, en utilisant une méthode de recrutement « boule de neige ». Les entretiens ont été intégralement transcrits et codés à l'aide du logiciel d'analyse qualitative MAXQDA 2022 (VERBI Software, 2021), en conformité avec les critères COREQ. Une analyse thématique de contenu a été réalisée, mobilisant les outils d'interprétation de la socio-anthropologie interprétative critique et la sociologie compréhensive.

Résultats *(intermédiaires, étude en cours)*

❖ Motifs individuels principaux de réticences et d'hésitations vaccinales

Absence de recul sur les vaccins contre la COVID-19 et importance accordée à la réflexivité et l'esprit critique
« La vaccination, c'est quelque chose de définitif. Donc, si c'est un vaccin qui fait du bien, tant mieux, mais c'est si c'est un vaccin qui fait du mal, c'est fini. En plus, si c'est des vaccins comme ça, on n'a jamais essayé, on a pas de recul, il y a rien… » (Entretien ESD10, 14. 06. 2022).

Effets secondaires observés au sein de leur entourage et dans le cadre de leur pratique professionnelle

Importance fondamentale de l'autodétermination et des principes de liberté de recours ou de non-recours au vaccin
«Je respecte cette liberté individuelle. Et pour moi c'était un choix que les gens devaient faire eux-mêmes. […]. J'étais contre le vaccin, j'ai accompagné, j'ai pris des rendez-vous pour mon oncle (pour son vaccin) parce qu'il s'en sortait pas sur les plateformes; mais j'avais pas à intervenir là-dedans.(dans son choix) » (Entretien ESD3, 2022).

Doute éprouvé face au matraquage médiatique encourageant la vaccination, qui ne laissait pas de place à la réflexion et au débat
« dans les médias y avait aussi beaucoup tout ce qui est statistiques et tout, moi elles me semblaient un peu biaisées des fois, mais euh… Enfin j'ai l'impression qu'ils nous montraient que ce qu'ils avaient vraiment envie de nous montrer. » (Entretien ESD6, 30. 05. 2022).

❖Facteurs méso et macrosociaux de réticences et d'hésitations vaccinales

Les représentations de la vulnérabilité au virus et de l'immunité individuelle des infirmier.ère.s impactent les stratégies de non-recours au vaccin

Les contraintes institutionnelles et gouvernementales impactent peu les processus décisionnels en matière de recours à la vaccination
« Non, je n'ai reçu aucune pression de qui que ce soit. J'ai été soumise aux mêmes contraintes que le reste de la population » (Entretien ESD2. 09. 05. 2022).

La formation infirmière et l'expérience professionnelle induisent le développement préalable d'habitus en matière de gestes barrières et d'autres stratégies préventives

❖ Autres logiques d'hésitations et de refus du vaccin contre la Covid-19

Pour une partie de la population infirmière, les attitudes à l'égard des médecines alternatives et intégratives ont une incidence sur les logiques de recours vaccinales

Une grande partie de la population infirmière interrogée est favorable aux autres vaccins, en particulier les vaccins établis et protégeant des maladies graves (poliomyélite, tétanos, fièvre jaune, etc.)
« *pour moi, il y a d'autres maladies, d'autres épidémies qui justifient de se vacciner. Pour moi, le Covid ne justifie pas la vaccination obligatoire.* » (Entretien ESD17, 26.07. 2022).

Discussion

- ✓ Le non-recours à la vaccination contre la COVID-19 des infirmier.ère.s ne reflète pas un vaccino-scepticisme général mais une prudence à l'égard de ce vaccin spécifique.
- ✓ Le non-recours à ce vaccin est fondé sur une formation encourageant la réflexivité et l'esprit critique et les expériences et observations effectuées dans l'espace professionnel.
- ✓ La formation et les expériences en matière de médecine holistique et les habitudes en matière de gestes barrières favorisent le développement d'un regard critique sur le vaccin.
- ✓ Des analyses plus spécifiques porteront sur les représentations du droit de la vaccination; l'incidence des médias sur cette pratique vaccinale ; les stratégies préventives alternatives mobilisées et la perspective de la médecine contemporaine induite par l'attitude réflexive à l'égard du vaccin contre la Covid-19.
- ✓ Les résultats sont cohérents avec des données de référence inspirée des écrits de Dubé *et al.* (influence des médias, craintes d'effets secondaires, la perception du risque) et des données originales émergent (l'importance de l'expertise infirmière dans le processus décisionnel, la spécificité du contexte des politiques vaccinales suisses encourageant l'autonomie et le libre choix).

Références

Démolis R., Alexandre K, (2021) Logiques d'hésitations vaccinales à l'endroit du vaccin contre la COVID-19 du personnel infirmier dans les cantons de Genève et Vaud, protocole de recherche, financé par la Haute Ecole Spécialisée de Suisse Occidentale (HES-SO).

Dubé, E., Laberge, C., Guay, M., Bramadat, P., Roy, R., & Bettinger, J. A. (2013). Vaccine hesitancy: an overview. Human vaccines & immunotherapeutics, 9(8), 1763-1773.

rachel.demolis@hesav.ch - ketia.alexandre@hesav.ch

a. ***There were a lot of lies, a lot of fear, a lot of inconsistencies, a lot of discrepancies between reality and what we were shown."***
Media and Communication Representations Among Unvaccinated and Vaccine-Hesitant Nurses in Western Switzerland *Article soumis*

Valentine Mach-Perrot, Rachel Démolis, Gina Sobral, Adélia Gschwend Kétia Alexandre

School of Health Sciences (HESAV), University of Applied Sciences and Arts Western Switzerland (HES-SO). Lausanne

"There were a lot of lies, a lot of fear, a lot of inconsistencies, a lot of discrepancies between reality and what we were shown."

Media and Communication Representations Among Unvaccinated and Vaccine-Hesitant Nurses in Western Switzerland

ABSTRACT

During the COVID-19 pandemic, political and health authorities utilized traditional media outlets and social networks to emphasize the significance of vaccination for collective well-being. Health care professionals found themselves confronted with information emanating from various sources (political, institutional, and media) that sometimes present conflicting messages regarding vaccination. These messages also differed from their experiential expertise on the field. We therefore wonder what types of representations and discourses nurses developed regarding the various forms of media communication about the pandemic and how these contributed to the shaping of their vaccination logics.
This article is based on a socio-anthropological study that involved conducting 25 semi-structured interviews with nurses in French-speaking Switzerland who either refused to be vaccinated against COVID-19 or expressed hesitancy towards vaccination. The aim of this article is to examine how media communication has helped shape representations of proposed COVID-19 vaccinations as well as various practices of vaccine refusal among nurses.

We conducted an analysis of the participants’ discourse rooted in critical interpretative anthropology. To explore participants’ perspectives on media communication in the pandemic context, we draw on the concepts of vaccine hesitancy (Gaillaguet 2022; Monnais 2019; Troiano and Nardi 2021), media framing (Entman 1993; Lemarier-Saulnier 2016), and insights from the sociology of emotions (Polo et al. 2013).
Our findings reveal a predominantly negative and critical discourse among participants regarding the communication efforts of political and health authorities as well as traditional media. Three main criticisms were identified: (1) the uniformity of media reporting, (2) the overly dramatic tone of the authorities’ speeches, and (3) contradictory information diffused by the media.

Keywords: nurses, representations, media, COVID-19 pandemic, vaccine hesitancy, vaccine refusal, disruptive event, mediatic framing

"There were a lot of lies, a lot of fear, a lot of inconsistencies, a lot of discrepancies between reality and what we were shown."
Media and Communication Representations Among Unvaccinated and Vaccine-Hesitant Nurses in Western Switzerland

The COVID-19 pandemic from 2020 to 2022 prompted intense information dissemination by political and health authorities, facilitated by traditional and contemporary media in Switzerland and internationally, aimed at informing the population (Kroepfli 2020; Salerno, Pignard-Cheynel, and Carlino 2020). To keep the population informed during the five successive waves of COVID-19, the political and health authorities communicated extensively to ensure that citizens complied with several preventive measures aimed at avoiding overburdening the health care system. When vaccination against COVID-19 became available in December 2021 for caregivers and people categorized as at risk and then in May 2022 for the entire population, political and health authorities considered it the optimal remedy for combating the spread of the virus. On the recommendations of the World Health Organization (WHO), Swiss public and health organizations such as the Federal Office of Public Health (FOPH) and the Swiss Confederation communicated their prevention messages on social networks (Twitter, Facebook, and Instagram), leading to a significant increase in subscribers to these online accounts during the pandemic period (Kompani and Dupras 2020; Salerno 2020). According to Gilardi et al. (2021), there is a certain alliance in Switzerland between the political and health authorities and the media (journalists, bloggers, etc.). These messages primarily focused on the measures to be adopted during the pandemic (for example, hand hygiene, maintaining a distance of 1.5 meters between individuals) and later extended to vaccination promotion and reminders.

This extensive communication led to various receptions on the part of individuals in terms of vaccine choice (Fauville 2022). Indeed, according to Fadda et al. (2021), for individuals questioning the benefits or risks of the new vaccines developed in record time, this active

communication on the pandemic (and then on the need for vaccination) may have influenced their decision to resort to vaccination. Among those undecided about vaccination were nursing staff, who, at the heart of the system for implementing health measures, stood out as the main heroes of the pandemic, regularly applauded. However, they were also the most hesitant to vaccinate (Asri et al. 2022; Peirolo et al. 2021; Zürcher et al. 2021). The concept of vaccine hesitancy will be further detailed in the text. While referring to vaccine hesitancy, we rely on Dubé et al. (2013), Monnais (2019), and Troiano and Nardi (2021), who demonstrated that the vaccine hesitancy posture lies more on a decision-making continuum between outright refusal of vaccination and its total acceptance and cannot remain associated with a simple rejection of vaccination. The population included in this corpus of participants comprises nursing staff who refused vaccination and never received it as well as "late accepters," nurses who initially declined vaccination but later accepted it at least six months after the vaccine became available to them.

However, we wish to specify that the vast majority of participants in this study refused vaccination and never received it. To understand the reasons for vaccine hesitancy and refusal among nursing staff, we conducted a socio-anthropological study of nurses hesitating or refusing to vaccinate against COVID-19. The aim of this article was to analyse the representations and discourses expressed by nurses who were reluctant to vaccinate, in relation to political and health authority communications relayed by the media. Our results show that all participants interviewed on this subject held a clear and critical perspective on the information the media disseminated during the pandemic, including its frequency and its intent regarding the population. In this article, we focus on the views of nurses in French-speaking Switzerland on media coverage of health measures and vaccination.

Our article is structured as follows: The first section concerns our analytical framework, focusing on communication from the authorities and its reception by nursing staff as well as on vaccine hesitancy and nursing staff. We then present our methodological approach, and in the third section, we present and discuss our main findings.

ANALYTICAL FRAMEWORK: MEDIA FRAMING AND VACCINAL HESITANCY AMONG HEALTH CARE PERSONNEL

The context of the COVID-19 pandemic led political and health authorities as well as the general public into a state of great uncertainty. Decision makers had to act quickly to find a response to the unprecedented health situation, prompting them to engage in more direct and regular communication with citizens. This communication encompassed conventional media channels, such as radio, television and the press, and the more frequent use of social networks (Kompani and Dupras 2020; Salerno 2020; Schäfer and Füchslin 2021).

To better understand the positioning of nursing staff in relation to health measures and vaccination in particular, our analytical framework connects official communication from political and health authorities to vaccine hesitancy among nursing staff. We thus analyse how official communication campaigns by authorities contributed to the development of vaccine hesitancy among nursing staff in the context of the COVID-19 pandemic.

Crisis Communication from Authorities and its Reception by Nursing Staff

Due to its singularity and sudden emergence, the COVID-19 pandemic constitutes, as Kaufmann and Gonzalez (2019:7) describe it, a "disruptive event" in that it deviates from expected, prepared, or anticipated occurrences (such as commemorative ceremonies). This disruptive event, akin to a natural disaster or an attack, "interrupts the course of events and disrupts the routines of perceiving reality." Its occurrence forces citizens and state entities to process it and subsequently reconsider it for society to recover. Therefore, authorities must ensure effective communication as well as appropriate situational responses and action plans to manage a society in distress and facilitate its return to a certain level of stability.

In addition to the communication political and health authorities (such as the Confederation, Task Force, FOPH, WHO, and cantonal doctors) provided during the pandemic on official websites and social networks, Swiss media communication aligned with statements made by official Swiss entities (Gilardi et al. 2021). Between March 2020 and the beginning of 2022, numerous articles on the Swiss Radio Television website and in the newspaper *Le Temps* reiterated information found on official websites. In a context of loss of meaning and reference points, the media serves as one of the entities responsible for making sense of the event by describing the facts, its uniqueness, the involved parties, the affected populations/persons, the risks, and the solutions for restoring a peaceful social environment.

To understand how receivers media perceive information, the notion of "media framing" is of interest (Entman 1993; Lemarier-Saulnier 2016). Entman (1993) emphasizes the possible impact of a media-framed discourse on receivers' representations. Information the media reports is not neutral; it is contingent upon journalists' choices (or their editorial line) and the objectives they seek to achieve (informing or alerting the population to a fact, garnering public adherence to an idea, etc.; Entman 1993:51). Therefore, building a framework requires focusing the message

on certain aspects of a phenomenon[1] (highlighting the benefits of vaccination in a crisis context, the occupancy rates of intensive care beds, and the number of deaths). These aspects are made salient in the communication and exert a certain influence on the reader's perception of reality through their recurrence and salience (Entman 1993:51-52). Nevertheless, even if certain aspects of a social phenomenon are highlighted through media framing, receivers maintain a degree of interpretation. Therefore, the author outlines four characteristics of the framing concept in the communication process: Communicators construct frames consciously and/or unconsciously based on their ideas and belief systems; texts incorporate these frames through the presence (or absence) of terms or repeated phrases; receivers may or may not perceive the frames of the text and the communicative intentions of the communicator; and culture consists of socially constructed frames often invoked, stemming from socially accepted beliefs and representations. Therefore, Entman considers the social environment of communicators and receivers as well as the constructed text (message). However, he does not account for the possibility that receivers of the message may interpret it differently from the communicators' intended meaning.

These discursive framings can therefore influence not only receivers' perceptions of specific subjects (such as COVID pandemic management and vaccination) but also the emotions they collectively experience. Authorities' media framing can exert an influence on receivers' emotions. These are not limited to uncontrolled instinctive reactions but depend largely on the social and cultural context in which they occur (Kaufmann, 2020:18).

[1] These aspects can be keywords, expressions, sources of information and phrases that reinforce certain facts (Entman 1993).

Polo et al. (2013:43) underscores that emotions expressed in people's discourse can be categorized along two dimensions: the pleasure axis (ranging from pleasure to displeasure) and the intensity axis (from strong emotion to weak emotion). The authors further argue that certain cultural presuppositions, such as the association of death with a negative event, emotionally "frame" discourse along these two axes (Polo et al., 2013:43).

In this way, it is possible to interpret people's discourse along these axes to analyse the type of emotions they feel in a given context. These axes allow us to determine the social value (positive or negative) attributed to the social phenomena recounted in individuals' discourse.

These theoretical elements enable us to place our participants' discourse in the specific context of the authorities' crisis communication during the COVID-19 pandemic and observe how they discursively position themselves in relation to the role of the media during the pandemic.

Defining Vaccine Hesitancy

We refer to several authors while defining vaccine hesitancy in this text. Monnais (2019), drawing on certain studies conducted in the 2000s in Canada, shows that individuals hesitant about vaccination consider themselves poorly capable of truly judging the value, efficacy, and safety of existing biological products and that this confusion can lead to vaccine hesitancy. She also raises the point that vaccine hesitancy has been closely linked to a distrust of science and traditional medicine since the 1970s and is part of a movement of critical distance from biomedical injunctions.

Gaillaguet (2022) emphasizes that over the past 10 years, definitions of vaccine hesitancy have evolved through a redefinition process carried out by several authors (Dubé et al. 2013; Macdonald 2015). Previously, the term "vaccine hesitancy" was associated with vaccine refusal though it encompasses a multitude of sometimes contradictory attitudes among individuals. Therefore, this conceptual reframing allows for a wide spectrum of attitudes between total acceptance of a vaccine and complete rejection of it.

Dubé et al. (2013) point out that individuals hesitant about vaccination constitute a heterogeneous group situated in the middle of a continuum. They may refuse certain vaccines and accept others. They may also delay vaccines or accept them according to a recommended schedule.

Finally, Macdonald (2015) highlights that vaccine hesitancy is associated with various factors, such as trust in the safety of vaccines, trust in Health care professionals administering them, and trust in professionals making decisions to authorize vaccines for a given population.

While referring to vaccine hesitancy, we therefore rely on Dubé et al. (2013), Monnais (2019), and Troiano and Nardi (2021), who demonstrated that the vaccine hesitancy posture lies on a decision-making continuum between outright refusal of vaccination and its total acceptance and cannot remain associated with a simple rejection of vaccination. In this manner, a multitude of varied (sometimes ambivalent) attitudes provide a better understanding of individuals' vaccine choices. It is also essential to consider the evolving sociocultural contexts and circumstantial situations that influence the development and expression of attitudes (Gaillaguet, 2022). Individuals faced with the choice of vaccination weigh the costs and benefits of vaccination for themselves or their children. Vaccine hesitancy is not an irrational, instinctive decision but refers to attitudes towards vaccination stemming from various scandals[2] that took place in the second half of the twentieth century and were widely reported by the media, engendering a certain distrust of vaccination (Guimier 2021; Monnais 2019; Ward and Peretti-Wattel 2020). Dubé

[2] To name a few instances, in 1986 in Canada, a field hockey player ended his career after receiving a Hong Kong flu vaccine that caused asthma. In 1990, controversies arose in France over the hepatitis B vaccine. In 1998, the Wakefield case occurred, in which a gastroenterologist wrote a study published in The Lancet reporting a link between MMR vaccination and autism in children. Ten out of twelve co-authors of this study later retracted their interpretation, and the study became the center of major controversies (Rao and Andrade, 2011). Although the study was retracted, the hypothetical association between MMR vaccination and autism still remains in the public debate, especially among groups opposed to vaccination.

et al. (2013) showed that individuals' attitudes to vaccination are not static and uniform, highlighting that vaccine-hesitant individuals may accept certain vaccines while refusing others. They also present 12 factors that can contribute to the construction of a vaccine hesitancy posture: (1) historical, political, and social context; (2) the role of media communication; (3) the role of public health authorities and vaccination policies; (4) the role of health professionals; (5) individual decision-making processes; (6) the perception of vaccination as a means of maintaining good health; (7) knowledge about vaccination; (8) experiences with vaccination services; (9) recommendations of health professionals and use of alternative medicine; (10) risk perception; (11) subjective norms, social pressure, and responsibility; and (12) religious beliefs. From a similar perspective, Troiano and Nardi (2021) highlighted that vaccine hesitancy is induced by factors such as confidence in vaccination, complacency, convenience, and access to vaccination. Therefore, vaccine hesitancy can be interpreted according to various factors, and it depends on the context in which it occurs. The fourth factor in vaccine hesitancy, as outlined by Dubé et al. (2013), pertains to the role of health care professionals. Indeed, leveraging their expertise, they serve as the cornerstone individuals can rely on for discussions, advice, or health guidance. Throughout the pandemic, health care personnel were central to the implementation of health measures and vaccination. This makes it particularly intriguing to investigate vaccine hesitancy among these very professionals. In their quantitative survey of 829 health care professionals in Israel, Dror et al. (2020) showed a high level of scepticism about the COVID-19 vaccine. Their results explain that "adherence to vaccination" is based on personal perception of risks and benefits, which may be influenced by information received about vaccine safety.

Berrada et al. (2020) contend that the determinants of vaccine hesitancy among health care professionals are often personal. In their study, which involved interviews with pharmacists and doctors in France, they highlight several factors: weakened trust in institutions, lack of

transparency from French political and medical authorities with health care professionals, the need for improved information transmission through regular exchanges between health care professionals and vaccine authorities, and gaps in communication among health care professionals. Berrada et al (2020) go on to say that the doctors and pharmacists in their study criticize media communication for being overly focused on sensationalism and assert that the internet and social networks provide easier access to information on vaccination but that these platforms are flooded by "false information." The qualitative study by Fadda et al. (2022) on the understanding of the vaccination process and the key moments influencing the choice of vaccination, carried out among health care personnel working in nursing homes, shows that health care professionals felt overwhelmed by the information they received on vaccination, finding it incomplete and contradictory.

These various studies have focused on the vaccination decision-making process, addressing the various factors that may be involved in this choice. Our article is intended to present nurses' representations and discourses of political and health authority communication during the pandemic as well as how media discourse contributes to the construction of representations of vaccination and a vaccine hesitancy posture.

METHODOLOGICAL APPROACH

This article is part of a socio-anthropological study focusing on the logics of non use, refusal, and vaccine hesitancy among nurses in the cantons of Vaud and Geneva.[3] It began in April 2022 and concluded on October 31, 2023. This study is intended to promote understanding of the

[3] This study underwent a clarification of responsibility with the Cantonal Commission for Research Ethics on Human Beings before its launch (December 2021).

logics underlying vaccine refusal and hesitancy among nursing staff by describing the processes that lead to the emergence of vaccine hesitancy discourses and practices as well as the factors influencing them.

This article is focused more specifically on nurses' reception and perception of official communication from the authorities and the media. We analyse how nurses informed themselves about the necessity for vaccination. The corpus consists of 25 interviews with male and female nurses over the age of 18 working in the canton of Vaud or Geneva who had shown some hesitation about vaccination. This geographical choice provided a precise, well-defined sample, and participants from these cantons were subject to similar cantonal regulations and public-health measures. Our recruitment process involved two approaches: First, we distributed flyers and information through social media and professional institutions and informed our colleagues about the study. Second, we employed the snowball method, in which participants recommended colleagues or friends who met the study criteria and would be interested in being interviewed. We aimed to have multiple entry points to prevent interviewing multiple participants from the same social circles. In total, we recruited participants from 17 entry points (who did not know each other). The researchers ensured diversity in their recruitment to create a varied and heterogeneous participant pool. Twenty-one women and four men were interviewed. Seven of them worked in a university hospital (in oncology, septic surgery, plastic surgery, intermediate care, in the COVID sector, and in an outpatient dialysis service). Six were homecare nurses, employed in public structures and practising as self-employed affiliates of nursing cooperatives. The other participants were nurse assistants in a rehabilitation centre, liaison nurses in a care and rehabilitation unit, psychogeriatric nurses in a home for elderly peoples, sampling nurses for a laboratory, teachers or researchers in a university, outpatient psychiatric nurses in a private centre, and expert consultants in palliative care. Four of our interviewees were working in vaccination centres.

The snowball recruitment method is highly recommended in qualitative studies involving sensitive subjects (Naderifare et al. 2017). As the researchers were conducting several fieldwork sessions in the medical and hospital environments of French-speaking Switzerland, they found it easier to establish contacts with health care professionals. The 25 interviews conducted between April 2022 and June 2023 were semi-structured to guide participants through thematic questions essential for understanding the process of vaccine hesitancy while allowing them flexibility to elaborate on their comments without intervention from the researchers. This approach enabled the interview guide to evolve throughout the research, combining a structured approach, using constructed questions, with an inductive and iterative approach (Beaud and Weber 1997; Tong, Sainsbury, and Craig 2007). The interview grid included two open-ended questions on the participants' relationship with the media in French-speaking Switzerland during the pandemic.[4] The interviews were coded using MaxQda qualitative software to extract the salient themes in the participants' discourse. Another member of the team then cross-checked each coded interview to ensure that the categories were coded systematically, and the interviews were summarised. The thematic codes were generated on Excel spreadsheets, and the researchers systematically analysed the codes to extract the most significant themes and verbatims. The monthly team meetings were used to consolidate the tree structure generated on MaxQda, and developments in terms of collective analysis took account of the various areas of expertise. To answer our specific question on the media's impact on nurses' representations, we used our interviewees' responses on their perceptions of communication and the

[4] Question 1: "Do you trust the information you receive from the media?"
Question 2: "Through which media do you get information about COVID-19 vaccines?"

media during the vaccination campaign. The analytical approach used at this stage was based on discourse and content analysis (Née 2017) to interpret the participants' statements and place them in the context of the vaccination campaign.

FINDINGS

Before delving into the analysis of the interviews, it is noteworthy that among the sources of information the participants used most, the internet and social networks were the most prominent, followed by institutional sources, television, radio, and print media. However, it is important to highlight that participants often integrated various sources of information given their familiarity with the subject matter as health care professionals.

The 25 participants almost unanimously criticised communications from the authorities and the information conveyed by the media. Analysis of the interviews regarding their relationship with and confidence in the media and the authorities during the vaccination campaign revealed various perceptions and points for reflection. We identified three main types of critical reaction to the authorities' messages and positions.

This makes it possible to draw up a typology of negative perceptions of media discourse as defined by Charaudeau (1997),[5] the main criticisms of which relate to (1) a standardized discourse with no room for debate, (2) exaggerated anxiety-provoking discourse, and (3) the contradictions in the authorities' discourse. In this way, we were able to identify nurses' main critical arguments and gain a better understanding of nurses' perceptions of media discourse and the construction of participants' representations of vaccination.

[5] Charaudeau (1997) describes a typology as "a classification of objects with similar characteristics that differentiate them from other types. A typology can be established for species, social structures, political regimes, languages, and texts."

Table 1 synthesizes the three main perceptions of messages from authorities and media. Each participant can be classified into multiple categories, while some may not fit into any category. On this topic, one interviewee did not respond.

Table 1. Perception of Media Discourses

Speech thematics	Interviews	Findings	Percentages	Types of media used
Uniform messaging, lack of debate, undistributed speech, no neutrality	2, 3, 8, 9, 12, 14, 15, 17, 19, 21, 23, 24	12 participants: Medias disseminate uniform information, and speech is not distributed equally across media channels	48%	Regional newspapers, television, internet, well-known/controversial personalities, and institutional sources
Exaggerated anxiety-inducing discourse	2, 4, 6, 11, 20, 21	6 participants: The media broadcasts repetitive, anxiety-inducing information, causing distress	24%	Regional newspapers, internet, institutional sources, well-known/controversial personalities, and television
Contradictory information disseminated by the media	1, 4, 11, 18, 25, 26	6 participants: Information conveyed by the media are contradictory	24%	Television, internet, regional newspapers, institutional sources, and well-known/controversial personalities

The Standardized Discourse and the Absence of Debate

The perception of uniformity in discourse, a standardized message from authorities, and the absence of debate emerge in many of the participants' responses (12 out of 25) and constitute our most significant finding (see Table 1). This theme of uniformity in information and the lack of debate among participants cannot be explained solely by the timing of the pandemic during which the interviews were conducted because participants interviewed at various stages of the study mentioned it. Neither the nursing specialization nor the participants' age seem to affect this issue. Furthermore, the specialists included individuals of various ages and professional specializations, including those in ambulatory practice, hospital units, and education.

Participants' discourses are particularly rich regarding this perception of one-directional, restricted information during the pandemic:

> . . . Constant bombardment of media had an impact. . . . If we go one step further, I would say that it's the first time there was an alliance between politicians and the media, where there was a very standardized message, and any message that deviated from the framework was excluded from the public space. . . . In the news . . . there was one day an ethicist who dared to raise ethical questions on the issue, they cut her off, and then moved on to another topic. (Interview 3, May 11, 2022)
> . . . In terms of public health, there were no other messages and then no debates either, no scientific controversies about the vaccine, with different opinions from different scientists. We always heard the same thing . . . in the media, in the newspapers, and it was difficult to find other information. (Interview 17, July 26, 2022).

Through their interviews, the participants perceive a "framed" media discourse (Entman 1993; Lemarier-Saulnier 2016) around a position (the necessity of vaccination and its benefits) that aims more to convince the population than to inform them. To borrow Entman's (1993) categories, the authorities (*communicators*) developed communication and prevention messages (*text*) during the health crisis, and our health care participants

(*receivers*) received this message and interpreted it according to their values (professional and personal) and beliefs and in the context of the crisis (*culture*). In the context of an exceptional disruptive event, citizens' reactions are more emotional and authorities must find quick responses, with little room for manoeuvring or opportunities for reflection (Kaufmann and Gonzalez 2019:7). The term "media bombardment," mentioned by a participant, is therefore evocative in describing their representation of communication and a certain frenzy of information dissemination by the media. Therefore, participants, accustomed to debates and medical discussions among professionals as well as with patients and their families (about medication, patient needs and wishes, etc.), had to face a crisis context in which the possibilities of debating alternative remedies to the vaccine and taking a step back were suspended (Kroepfli 2020).

If we consider the 12 factors of vaccine hesitancy Dubé et al. (2013) presented, we can observe that four factors (2, 3, 7, 11: media communication, the role of authorities and vaccination policies, knowledge about vaccination and subjective norms, social pressure, and responsibility) illustrate our participants' stance. In nursing education and in practice, the values of reflexivity, self-determination, and patients' freedom of choice are essential[6] (Cercleron 2023). Therefore, the impression of a standardized position was unacceptable for these health care professionals and led to feelings of incomprehension and anger: "I watched the news, but I was losing it every night watching the news, you know?" (Interview 3, May 11, 2022). "There are articles coming out from all over Switzerland. Let's stop treating people like idiots. It's not for the elderly that we did this" (Interview 21, December 7, 2022).

[6] These data emerge from our study and are addressed in another text produced by the team.

"The spotlight [is] on health care workers. And then this . . . popularization of how it goes for health care workers in health care . . . I found it so low" (Interview 21, December 7, 2022).

These quotes clearly highlight the participants' feelings of anger and frustration as evidenced in their discourse. This frustration is also accompanied, for some, by a sense of disappointment and sadness toward the authorities. The participants' discourse aligns with the findings of Berrada et al. (2020) regarding weakened trust in political and medical authorities and a perceived lack of transparency from them. Therefore, even though the health care participants' emotions are not identical, they complement and converge, becoming somewhat "aligned," in Kaufmann's (2020) sense of the word. We can therefore speak of collective emotions among participants hesitant to take the COVID-19 vaccination, made perceptible through their discourse and interactions.

The Surplus of Anxiety-Inducing Information

In addition to the perception that the information the media conveyed was one-sided, the perception of an excess of distressing information is also very prevalent in the participants' responses (6, see Table 1). The timing of the interviews (between April 2022 and June 2023) does not influence the responses. Indeed, some of our interviews were conducted after the health restrictions were lifted, when participants were no longer exposed to daily communication about the COVID-19 pandemic. If we investigate whether sociodemographic information regarding the various

respondents created a diversified perception of media communication, we observe several elements. First, there is no link between the participants' medical specializations and their perceptions of an excess of distressing information. However, the participants' age may have played a role in this perception because the six participants who highlighted this issue were between 32 and 40 years old. They belong to the generation in which the internet and certain social networks (Twitter, Facebook) began to play a significant role in people's daily lives. Having always known the internet and social networks, these participants use various types of media (traditional and contemporary) to form an opinion about the pandemic (Salerno et al. 2020). These participants gathered information through social media (4 out of 6), by reading regional newspapers (3 out of 6), by consulting institutional sources (2 out of 6), by referring to controversial internet personalities (2 out of 6), and by watching television (1 out of 6).

Therefore, we can hypothesize that this perception of an excess of distressing information is linked to the habit of seeking information from numerous sources and the fact that during the pandemic, political and health authorities seized all media channels to convey their message (Kompani and Dupras 2020; Salerno 2020). Participants noted that information regarding the pandemic and the vaccination campaign was omnipresent and "anxiety-inducing":

> . . . We never mourn femicides on the radio, we never mourn deaths from car accidents, and yet, it must add up quite a bit per week, so why do we mourn COVID deaths? . . . We never mourned deaths from the flu, and the flu still causes a lot of deaths each year. So, if people had been used to hearing . . . 'There are 200 flu deaths today. There are 25 flu deaths today,' they could have compared it to COVID, and these numbers could have been put into perspective, but there, just thrown out like that, they just have an anxiety-inducing effect. So probably, it might be intentional because that way, people stay at home and respect the lockdown, because they're afraid of being one more dead. . . . (Interview 4, May 25, 2022)

This excerpt highlights the numerical data's effect on individuals' representations and the influence of a framing effect. The participant denounces the importance given to counting the number of COVID-19 deaths compared to other deaths rarely presented numerically in the media. This framing of information, focused on the danger of COVID-19 and hence on the necessity of vaccination, influences the perceptions of receivers who will either adjust their practices according to the message (opt for vaccination) or, conversely, reject the presented framing and go against it (become agitated and refuse vaccination). As Dror et al. (2020) found, individuals' vaccine acceptance relies on a personal perception of vaccine risks and benefits per received information. Therefore, this framing effect can influence the receivers' emotions. Media information on the virus's danger as well as the number of deaths and hospitalizations is classified on the negative side of the valence axis and on the strong-emotion side of the intensity axis (because the relayed information often influences individuals' perceptions). Therefore, individuals perceive the pandemic as serious and dangerous, and the intensity of their emotions is strong (anxiety, anger, etc.). However, in the case of a position opposite that of the authorities, such as that of the participants, the pandemic would still be considered negative on the valence axis. However, vaccination and the risks it entails would be seen as more serious and harmful in the long term. Therefore, on the intensity axis, the participants' emotions are also strong but more in fear of the vaccine being made compulsory for health care workers and the unclear media information about it rather than in fear of the virus. Moreover, most participants noted that they were not afraid of catching COVID-19 or developing a severe form of the disease.[7]

[7] This point is further developed in another article our team is writing.

The Contradictory Information Conveyed by the Media

Several participants (6 out of 25 health care workers) found the information on vaccination (and on the pandemic more broadly) conveyed by the media contradictory (see Table 1). The interview dates vary significantly. We can therefore hypothesize that when the interview was conducted (between the beginning of 2022 and 2023) does not influence the participants' perception of contradictory information conveyed by the media. Additionally, the profiles and medical specializations of the nurses in their practice are quite varied, encompassing home- and hospital-based practices. Therefore, the data suggest that there is no correlation between nurses' medical specialization and their perception of contradictory information. However, the participants' ages are relatively similar, ranging between 37 and 53. Therefore, the participants were almost from the same generation. Consequently, the fact that participants found media information ambiguous can be explained by the fact that through their nursing education and practice in outpatient and inpatient settings, health care workers must adhere to clear and strict regulations and guidelines to best care for patients. To support this point, the fact that participants aged 37 to 53 criticized the nature of the conveyed information is significant because since the 1980s, nursing work internationally has been subject to increasingly stringent administrative directives and justification for every medical act (Haberey-Knuessi et al. 2013; Pedroletti 2000). Furthermore, nursing education has become more formalized and comprehensive in administrative aspects since the reform of nursing education in the 1990s (Pedroletti 2000).[8]

[8] In French-speaking Switzerland in 1994, nursing education underwent a fundamental change when a generalist nursing program was developed, merging somatic disciplines with psychiatry. Consequently, nursing education was no longer specialized, requiring students to master various types of care as well as institutional regulations and directives.

Participants who completed their nursing education during the same period, in the 2000s, in Switzerland and abroad were therefore socialized to this new codification of nursing practice. Receiving contradictory information in their daily practice can be catastrophic for patients and their professional future (risk of sanctions, etc.). Therefore, it would be more difficult for these professionals to accept that political and health authorities, in the uncertainty of a health crisis, disseminate ambiguous information through the media. Consequently, the frequency of information and its contradictions is denounced with anger:

> . . . With all these inconsistencies and this message, it's crystal clear to me. . . . I had reached a point where I couldn't stand seeing the syringes, the injections, that we saw all the time. . . . All the publicity around these injections made me sick to my stomach . . . but really, I couldn't stand seeing them anymore. (Interview 26, June 30, 2023).
> . . . The discourse, the health policies were very ambiguous because on one hand, there's the recognition that the vaccine doesn't prevent transmission, but on the other hand, there's a desire to give a third dose to everyone and a fourth dose to high-risk individuals. And never in the discourse of health policies conveyed by the media have we heard speeches like "Well yes, we thought we would get through this thanks to the vaccine. We thought vaccination would prevent transmission. Well, no, we realize it doesn't have that intended effect, so maybe we modify our policy and then target vaccination for really high-risk individuals." I'm a little disappointed that I didn't hear that kind of discourse. (Interview 4, May 25, 2022).

This quote demonstrates the participant's incomprehension of the authorities' decisions regarding the measures. The health care worker highlights the message's ambivalence and a certain lack of clarity, which led to health care personnel not knowing how to position themselves to ultimately "do the right thing." Here, the measures are not directly contested but rather the participant's lack of understanding of their association. By expressing disappointment and associating it with their perceptions of health policy (contradictory discourse and measures), the participant embeds their emotionally charged discourse, if we consider the valence axis by Polo et al. (2013), on the negative side toward a dominant public

discourse benefiting from a certain social validity.[9] Indeed, vaccination in general is a medical process considered positive in health policies and by the population (Moulin 1996). Therefore, the participants' representations are situated in a critique of the socially accepted vaccination policy and its portrayal in the media. The media discourse's ambivalence is therefore perceived as negative in a crisis context in which it is reassuring for individuals and beneficial for health care workers to receive clear instructions. Fadda et al. (2022) also noted this observation of contradictory information in their study conducted with health care professionals.

CONCLUSION: FROM VACCINE HESITANCY TO DEFIANCE OF AUTHORITIES

Our findings reveal a certain homogeneity in respondents' perceptions of media communication during the vaccination campaign. Despite differences in specialization, region, and age, respondents shared negative representations of communication from authorities and the media. Some respondents noted that media information was too one-sided, lacking opportunities for debate. Others mentioned finding the conveyed information anxiety-inducing, exaggerated, and contributing to a climate of fear. Finally, some participants reported finding the communication ambivalent (especially in promoting vaccination despite it not preventing virus transmission), lacking coherence, and sometimes incomplete. Therefore, these three categories of perception of official communications only reinforced a negative view of respondents' vaccination choices, characterized by a

[9] Indeed, the valence axis (pleasure-displeasure) is situated in a contextual framework (in our case, the media campaign surrounding COVID vaccination) in which cultural preconceptions determine a value assigned to discourses (therefore, the media message informing the population of the benefits of vaccination would be positively connoted). However, it is interesting to utilize this axis to interpret our participants' discourse to understand their representations of media communication during the pandemic.

loss of confidence in political authorities and in scientific discourse: "This whole COVID thing makes me listen to mainstream media with extreme caution, and I don't really trust what I hear anymore" (Interview 4, May 25, 2022).

A certain distancing can be observed among the participants: Either they continued to gather information through traditional (newspapers, radio, television) and contemporary (social media) media, or they turned away from them and favoured debates among peers or with close contacts. Among the latter, we can even identify a position, albeit very minority, among our respondents (3 out of 25) that could be described as *a rupture* in the sense that some participants expressed their refusal and criticism of institutional and media communication by joining or even participating in alternative communication networks (discussion groups on Telegram, the collective Réinfo Santé Suisse International, etc.). This emotional response led some participants to develop their position by consulting other sources (online documents from U.S. military bases, books, and studies written by individuals openly opposed to vaccination) and by building networks of individuals who share the same opinions. It is noteworthy that the discourse of political and media authorities was not deemed satisfactory by the participants; they adopted a posture of distrust toward the information conveyed. This distrust led them to consult other types of sources, question the necessity and benefits of vaccines, and be hesitant about vaccination (Dror et al. 2020; Dubé et al. 2013; Monnais 2019).

To advance this study, it would be interesting to analyse these alternative networks of health care professionals through interviews with members or content analyses (such as analysing Telegram messages and websites). This would help identify an argumentative repertoire and develop a typology of discourses of *rupture*. This stance of rupture regarding official communication on health measures and vaccination also seems to be combined with a more general distrust of authorities, whether political, administrative, scientific, or journalistic. Furthermore, it would

be particularly relevant to investigate to what extent the results discussed in this text, concerning the Swiss context, differ or, conversely, are comparable to other countries where nursing staff were able to refuse vaccination without risking losing their jobs, as well as with nursing staff who chose to leave their jobs to escape the vaccination constraint imposed on their profession.

Limitations

Some limitations of this study should be highlighted. The sampling territory for our study was limited to French-speaking Switzerland. It would be interesting to extend this study to German-speaking Switzerland and Italian-speaking Switzerland to observe whether the relationship of health care professionals in German-speaking and Ticino regions with the media was similar to that of French-speaking professionals or significantly diverged. Additionally, this was a qualitative study because we currently lack quantitative data on these issues. Combining the qualitative socio-anthropological approach with a mixed-methods approach would be interesting to create a questionnaire on health care professionals' relationship with media communication during the pandemic and to make it available to French-speaking Swiss health care professionals, hesitant or not about vaccination, to obtain a more comprehensive view of opinions on media discourse during the vaccination campaign in Switzerland.

Funding Detail

This study was financed by the Commission scientifique du domaine Santé HES-SO -University of Applied Sciences and Arts Western Switzerland

(PIR-113633).

Disclosure Statements

The authors declare that they have no conflicts of interest and no financial interests to declare.

References

Asri, A., V. Asri, B. Renerte, F. Föllmi-Heusi, J. D. Leuppi, J. Muser, . . . and U. Fischbacher. 2022. "Which Hospital Workers Do (Not) Want the Jab? Behavioral Correlates of COVID-19 Vaccine Willingness among Employees of Swiss Hospitals." *PLoS One* 17 (5).

Beaud, S, and F Weber. 1997. *Guide de l'entretien de terrain. Produire et analyser des données ethnographiques*. Paris: La Découverte.

Berrada, S., N. Caroff, D. Navas, L. Moret, and J. F. Huon. 2021. 'Comment améliorer la couverture vaccinale en France? Étude qualitative auprès de professionnels de santé." *Pharmaceutiques Françaises* 79 (1):77–85. Elsevier Masson.

Cercleron, F. 2023. "Regard de soignant, regard de citoyen à propos de la pandémie Covid-19." *Kinésithérapie, la Revue* 23 (253):46–52.

Charaudeau, P. 1997. "Les conditions d'une typologie des genres télévisuels d'information." *Réseaux. Communication-Technologie-Société* 15 (81):79–101.

Dror, A. A., N. Eisenbach, S. Taiber, N. G. Morozov, M. Mizrachi, A. Zigron, S Srouji, and E. Sela. 2020. "Vaccine Hesitancy: The Next Challenge in the Fight against COVID-19." *European Journal of Epidemiology* 35: 775–79.

Dubé, E., C. Laberge, M. Guay, P. Bramadat, R. Roy, and J. A. Bettinger. 2013. "Vaccine Hesitancy: An Overview." *Human Vaccines & Immunotherapeutics* 9 (8):1763–73.

Entman, R. 1993. "Framing: Toward Clarification of a Fractured Paradigm." *Journal of Communication* 43 (4):51–58.

Fadda, M., K. Bezani, R. Amati, M. Fiordelli, L. Crivelli, E. Albanese, S Suzanne Suggs, and M. Caiata-Zufferey. 2022. "Decision-Making on COVID-19 Vaccination: A Qualitative Study among Health Care and Social Workers Caring for Vulnerable Individuals." *SSM-Qualitative Research in Health* 2.

Fauville, A. 2022. "Comprendre les determinants de l'hésitation vaccinale contre le Covid-19." Masters thesis. Faculté des sciences économiques, sociales, politique et de communication, Université Catholique de Louvain, Belgique.

Gaillaguet, J. 2022. "Comprendre l'expérience critique ordinaire : Enjeux épistémiques et méthodologiques d'une enquête sur l'hésitation vaccinale." *Questions Vives. Recherches en Education*, (37).

Gilardi Fabrizio, Theresa Gessler, Maël Kubli, and Stefan Müller. 2021. "Social Media and Policy Responses to the Covid-19 Pandemic in Switzerland." *Swiss Political Science Review* 27 (2):243–56.

Guimier, L. 2021. "Les résistances françaises aux vaccinations: continuité et ruptures à la lumière de la pandémie de Covid-19." *HER* 4:227–50.

Haberey-Knuessi, V, J-L Heeb, and E M De Paula. 2013. "L'enjeu communicationnel dans le système hospitalier." *Recherche en soins infirmiers* 115 (4):8–18.

Kaufmann, L, and P Gonzalez. 2019. "Ces événements qui nous affectent." Pp. 270–302 in *L'évènement imprévisible. Mobilisations politiques et dynamiques religieuse*, edited by L. Amiotte-Suchet and M. Salzbrunn. Paris: Beauchesne.

Kaufmann, L. 2020. "Ces émotions auxquelles nous sommes attachés. Vers une phénoménologie politique de l'espace public." Pp. 207–50 in *Les émotions collectives. En quête d'un "objet impossible*," edited by L. Amiotte-Suchet and M. Salzbrunn. Paris: Editions de l'Ehess.

Kompani, K, and A. Dupras. 2020. "'Restez à la maison': la communication des autorités sanitaires suisses et britanniques sur les médias sociaux pendant la pandémie de COVID-19." Pp. 79–119 in *Inventer le quotidien au temps du COVID-19: communiquer, soigner et s'organiser*, edited by M. Bourrier, M, Deml, and L. Kimber. Genève: Sociograph.

Kroepfli, C. 2020. "Crise du COVID-19: Analyse des communiqués de presse de l'Allemagne, de la Norvège, du Royaume-Unis de la Suède et de la Suisse sur la situation pré-pandémique et sur la situation du variant Alpha." Pp. 31–79 in *Inventer le quotidien au temps du COVID-19: communiquer, soigner et s'organiser*, edited by M. Bourrier, M. Deml, and L. Kimber. Genève: Sociograph.

Lemarier-Saulnier, C. 2016. "Cadrer les définitions du cadrage: une recension multidisciplinaire des approches du cadrage médiatique." *Canadian Journal of Communication* 41 (1):65–74.

MacDonald, N. E. 2015. "Vaccine Hesitancy: Definition, Scope and Determinants." *Vaccine 33* (34):4161–64.

Monnais, L. 2019. *Vaccinations: Le mythe du refus*. Montréal : Les Presses de l'Université de Montréal.

Moulin, A. M. 2014. *L'aventure de la vaccination*. Paris : Fayard.

Naderifar, M., H Goli, and F. Ghaljaie. 2017. "Snowball Sampling: A Purposeful Method of Sampling in Qualitative Research." *Strides in Development of Medical Education* 14 (3).

Née, E. 2017. *Méthodes et outils informatiques pour l'analyse des discours*. Rennes: Presses universitaires de Rennes.

Peirolo, A., K. M. Posfay-Barbe, D. Rohner, N. Wagner, and G. Blanchard-Rohner. 2022. "Acceptability of COVID-19 Vaccine among Hospital Employees in the Department of Paediatrics, Gynaecology and Obstetrics in the University Hospitals of Geneva, Switzerland." *Frontiers in Public Health* 9.

Polo C, C Plantin, K Lund, and G Niccolai. 2013. "Quand construire une position émotionnelle, c'est choisir une conclusion argumentative: le cas d'un café-débat sur l'eau potable au Mexique." *Semen. Revue de sémio-linguistique des textes et discours* 35:41–63.

Rao TS, Andrade C. 2011.The MMR vaccine and autism: Sensation, refutation, retraction, and fraud. *Indian Journal of Psychiatry*.53(2):95-6.

Salerno, S. 2020 "Communiquer une pandémie." Pp. 45–57 in *Le regard des sciences sociales*, edited by F. Dans Gamba, M. Nardone, T. Ricciardi, and S. Cattacin. Zurich: Seismo

Salerno, S., N. Pignard-Cheynel, and V Carlino. 2020. *S'informer en période de crise sanitaire: pratiques d'information et exposition aux fake news en Suisse romande pendant la première vague de COVID-19 (mars-avril 2020)*. Lausanne, Bienne: Initiative for Media Innovation, Office fédérale de la communication.

Schäfer, M, and T Füchslin. 2021. "Wie sieht die Schweiz Bevölkerung die Wissenschaft während der Pandemie ? Ergebnisse der COVID-19-Edition des 'Wissenschafts-barometer Schweiz.'" Pp. 58–67 in *Was können wir aus COVID-19 Fake News über die Verbreitung von Fehlinformationen im Allgemeinen lernen?* edited by S. H. Kessler, A. Jobin, S. Grüninger, and F Georgi. Bern: Swiss Academies Communications.

Tong, A, P Sainsbury, and J. Craig. 2007. "Consolidated Criteria for Reporting Qualitative Research (COREQ): A 32-Item Checklist for Interviews and Focus Groups." *International Journal for Quality in Health Care* 19 (6):349–57.

Troiano, G, and A Nardi. 2021. "Vaccine Hesitancy in the Era of COVID-19." *Public Health* 194, 245–51.

Ward, J, and P Peretti-Watel. 2020. "Comprendre la méfiance vis-à-vis des vaccins: des biais de perception aux controverses." *Revue Française de Sociologie* 61 (2):243–73.

Zürcher, K., C. A. Mugglin, M. Egger, S. Müller, M. Fluri, L. Bolick, ... and L Fenner. 2021. "Vaccination Willingness for COVID-19 among Healthcare Workers: A Cross-Sectional Survey in a Swiss Canton." *Swiss Medical Weekly* 151.

X Medical Anthropology at Home (MAAH) Conference: "At-homeless? The future(s) of medical anthropology "at home"

The construction of fear: for a socio-anthropological understanding of anticipation and fear, using the Covid-19 pandemic as a case study

DÉMOLIS Rachel, Haute Ecole de Santé Vaud (Switzerland). Rachel.demolis@hesav.ch

Team members[10]:

Rachel Démolis (PI, Research Fellow, Medical Anthropology)
Kétia Alexandre (Co-PI, Professor in Nursing Sciences)
Valentine Mach-Perrot (Research Collaborator, Socio-anthropology)
Adelia Gschwend (Research Collaborator, Socio-anthropology)
Gina Sobral (Lecturer in Nursing Sciences)
Songül Yavavli (Lecturer in Health Law)

INTRODUCTION

The concept of anticipation is of great significance in understanding how individuals construct their representations of the future. It is key to fathom one's life's meaning and its upcoming place in the world; it questions how the self and one's identity are reconfigured in uncertain times. While the COVID-19 pandemic reached individuals throughout the world, many struggled to envision the future. The concept of anticipation as a possibility to think about the future and shape it (Adams et al. 2009, p. 246) was challenged.

[10] This is a draft paper written for this conference. Please do not disseminate.

In this context, a socio-anthropological study was conducted in Switzerland to investigate the reasons why nurses refused or postponed receiving the COVID-19 vaccine. In this study, a recurrent element mentioned by the participants was the notion of fear. They depicted their various experiences of apprehensions, fears, or lack thereof (fear of getting COVID, fear of not getting it, fear of the vaccine, fear for the future, etc.).

In this paper, we aim to investigate how the socio-anthropology of fear (Boscoboinik and Harokova 2014, p. 9-27) may further the understanding of the notion of anticipation. We will explore discourses on fear, examining how participants described the media's role in instilling fear, its potential political use, and conversely, instances where individuals did not experience fear despite an anxiety-inducing context and how this absence of fear shaped their trajectories. We begin by detailing the methods employed in this study, followed by the presentation of our findings. Subsequently, we engage in a discussion of these findings, initially highlighting key aspects within the anthropology of fear literature. We then confront some of our key findings with literature related to the anthropology of fear. Finally, we conclude by discussing the concept of anticipation in the context of our data and the literature we have presented.

METHODS

This text is anchored in a socio-anthropological study focused on the logics of refusal and vaccine hesitancy among nurses in the cantons of Vaud and Geneva. The aim of the study is to describe the processes that lead to the emergence of discourses and practices of vaccine refusals or delayed uptake and to understand the factors contributing to these processes. The research team comprised two nursing science professors, three anthropologists, and a jurist specializing in vaccination research in Switzerland. The corpus is made up of 25 nurses over the age of 18 working in the canton of Vaud or Geneva.

The data collection occurred between April 2022 and June 2023. The researchers were careful to diversify their recruitment strategies to ensure a corpus of people from diverse and heterogeneous social spaces. The participants came from 19 separate entries. The remaining participants were recruited through the 'snowball' method, where initial participants were invited to recommend individuals in their network who had refused or delayed COVID-19 vaccination.

The researchers conducted semi-directive interviews, guiding participants through essential thematic questions to understand the process of vaccine hesitancy while allowing them the freedom to elaborate without researcher intervention. This approach facilitated the evolution of the interview guide throughout the research, combining a structured approach with constructed questions and an inductive iterative approach (Beaud and Weber 1997, p. 52; Tong et al. 2007, p. 349). In addition to the interviews, participants completed a socio-demographic questionnaire. This questionnaire included inquiries about their knowledge and interpretations of vaccination laws and regulations along with indications regarding the media they used.

We conducted content and discourse analysis, drawing inspiration from both critical anthropology and comprehensive sociological approaches. The interviews were fully transcribed and coded using MaxQda qualitative software to extract the salient themes in the participants' discourse. Each coded interview was then cross-checked by another member of the team to ensure systematic coding of categories. Interview summaries were drawn up for each participant in order to facilitate biographic and comprehensive understanding of each participant. Thematic codes were generated on Excel spreadsheets then systematically analyzed by the researchers. They summarized the diversity of arguments, compared them, and produced interpretations while also highlighting verbatims that most visibly expressed certain ideas that emerged. We held monthly team meetings to consolidate the tree structure generated on MaxQda software, and collective analysis developments took into account the different areas of expertise.

For this specific text, the following sub-codes were analyzed: "fear," "attitude towards COVID-19," "representation of one's vulnerability towards COVID-19," and "representation of COVID-19 severity."

FINDINGS

Fears expressed by participants and to them.

First and foremost, participants expressed various types and levels of fears either for themselves or others. Consequently, we will delineate the diverse levels of fear evident in our study, spanning from concern, preoccupation, and worry to anxiety, fear, and anguish. The data also revealed that participants shared not only their own fears but also the fears reported to them by their patients and their relatives, as well as fear for themselves, for others, and what is here described as ontological fears.

Types of fears, concerns and anxieties reported by participants.

Fears expressed by their partner, relatives and colleagues and fears expressed by patients	**Fears for others and ontological fears**	**Fears and concerns expressed by participants for themselves**	**Fears and concerns concerning and expressed by all parties**
Fears of being intubated	Fear for children who may be asked to be vaccinated.	Fear of not contracting COVID-19	Fear of contracting the virus and associated to lack of data and information about the virus
Fear of dying	Fear and concern for the future of humanity, as well as interactions between humans in the event of a new pandemic	Concern over how some colleagues or relatives or person they meet vilify and criticize them for not getting vaccinated	Fear of developing severe forms is associated with the uncertainty of how symptoms will progress when someone has contracted COVID-19
Fears of vaccine's adverse effects		Anxiety and distress triggered by conflicts with family members or	Fear of the future heightened by the uncertainty surrounding the virus, the measures to be taken,

		partners due to differing positions on the matter of vaccination	and the economic impact, particularly during the first wave when information was limited
Fear regarding relations between vaccinated and unvaccinated people		Anxiety triggered by information overload and media coverage that incessantly repeats death tolls and presents catastrophic perspectives	
		Concern over nurse's appropriate conduct: should a nurse go to work despite being COVID positive, because the workforce is need. Concern over when precisely it is safe to get out of confinement.	Fear regarding the vaccines linked to uncertainties regarding their safety, effectiveness, and appropriateness.
		Nurses had concerns about what the appropriate conduct is, questioning whether they should go to work despite being COVID positive due to the essential need for workforce. Another concern revolves around determining the precise moment it is safe to end confinement	Uncertainty persists regarding whether a specific population is at risk or if it is random. For ESD 11, the 'lottery' aspect of who could develop severe symptoms following contraction generated fear. Anxiety is heightened by the potential development of new variants that could potentially be worse
			Fear from the restrictions imposed due to not being vaccinated,
			Fear or concern about the potential impact on our lives from forthcoming governmental decisions

Nurses had concerns about what the appropriate conduct is, questioning whether they should go to work despite being COVID positive due to the essential need for workforce. Another concern revolves around determining the precise moment it is safe to end confinement.

Uncertainty persists regarding whether a specific population is at risk or if it is random. For ESD 11, the 'lottery' aspect of who could develop severe symptoms following contraction generated fear.

Most participants expressed that they are not concerned about contracting the virus or developing a severe form of it. However, one participant shared the fear she experienced when she did contract it and faced severe symptoms, particularly because a patient she treated at home was positive and eventually passed away. Others who had to close or limit their practice as reflexologists expressed financial concerns, having to temporarily shut down their activities. Additionally, several participants conveyed the fears they experienced when their older relatives contracted the virus.

Several participants reported experiencing anxiety triggered by criticism from colleagues and relatives. In some instances, divergent views on the vaccine led to arguments and strained relationships within their families or with friends and relatives. Jeanne, a 34-year-old nurse working in a psychogeriatric ward, eloquently expressed her experience, noting that initially, she received many praises for being a nurse working during the pandemic. However, she later faced adamant criticism because she chose not to get vaccinated, stating, “From being considered as angels, we became demons!”

In most cases, nurses were not stigmatized for not being vaccinated, and in some instances, they received support from their hierarchy. However, Carolina, a 38-year-old nurse working in a specialized ward for neurology and neurosurgery, reported working in a small hospital where individuals had to wear a badge indicating their vaccination status. This situation created significant tension among colleagues with different vaccination statuses, causing her to experience anxiety when going to work.

Furthermore, numerous participants expressed the fear they experienced in the general atmosphere, with several respondents criticizing the mainstream media for amplifying these fears. When expressing their fears, participants often link them to various forms of uncertainty which were

prevalent during the pandemic. Some participants describe their uncertainty about how symptoms will develop when someone has contracted COVID-19. Sonia, a 46-year-old hospital nurse working in an oncology department, associated her fear with the lack of data and information about the virus. All participants expressed uncertainties regarding the vaccine—its safety, effectiveness, and appropriateness. As shown previously, uncertainty also revolves around whether a specific population is at risk or if it's random. For Laurence, a 37-year-old nurse working independently as a home nurse near Geneva, the 'lottery' aspect of who could develop severe symptoms following contraction generated fear.

Several respondents also expressed deep concern over the prospect of children being vaccinated. Agnes, a 40-year-old nurse working as a liaison nurse in a rehabilitation center, expressed her concern for humanity. She shared that she had witnessed people overwhelmed with fear, solely preoccupied with themselves, buying necessities without considering leaving enough for the next person, such as pasta or toilet paper. Agnes voiced her fear that in a similar event, people might resort to violence, including the use of guns.

This sentiment aligns with the global disenchantment described by several participants. Some nurses articulate their distrust towards the government triggered by its decisions. In addition, several respondents expressed a form of disenchantment towards science and the way data is produced and published.

Representations of vulnerability, risk, the population at risk, and the efficacy of preventive strategies impact individuals' fear or lack of fear in the face of the pandemic. Participants' perception of their personal vulnerability to COVID-19 was essential to the level of fear or lack of fear they experienced. Most participants expressed that they had not been fearful of contracting COVID-19 because they did not perceive themselves as part of the 'at-risk' population. The presence or absence of fear is linked to individuals' perceptions of their own vulnerability and their representations of risks. For example, Aline, a 44-year-old at-home nurse near Geneva, and Annelise, a 34-year-old at-home nurse working in Geneva, expressed trust in their immune systems. Annelise, Gaelle, and Aida mentioned their youth, and Annelise, Laurence, Gaelle, Dina (a 30-year-old nurse who

worked in the COVID sector during the pandemic), Aida, and other participants stated that they are in good health. Consequently, they were not fearful of experiencing severe COVID-19 symptoms if they were to contract it.

The representation of which population could experience severe forms of COVID-19 also has a significant impact on participants' perception of fear. For example, Laurence mentioned that when she observed that anyone could get the virus, she became afraid. In contrast, Agnes stated she knew that the vulnerable population includes immunodeficient individuals, and she was aware that there are exceptions. However, she was not destabilized by this fact because she understands that it is the case in all epidemics. Her lack of fear is anchored in her previous medical and epidemiological knowledge.

Their representation of the gravity or severity of the virus is also crucial to understanding their potential fear towards the virus. For example, Laurence stated that she is more fearful of influenza.

Moreover, representations of the efficacy of protective strategies other than vaccines (washing, masks, avoiding door handles) and testing strategies (Regine, a 48-year-old nurse working in a dialysis ward near Lausanne, expressed confidence in her status and the efficiency of preventive measures ensured by tests). Aida, a 46-year-old nurse working in a hospital in intermediate care, mentioned that she had limited her interactions with persons who, according to her understanding, were most at risk. Rosalie, a 23-year-old working as an at-home nurse for the state, was not fearful due to his representations of the efficacy of precautionary measures and because he is accustomed to working in a context that is not so different with a “vulnerable population.”

Self-representation and experiential knowledge about oneself and professional experiential expertise contribute to their fear or lack of fear in the pandemic context. Self-representations and experiential knowledge about oneself are critical for individuals who express a lack of fear about

contracting COVID-19 or potentially experiencing severe symptoms if they were to contract it. Agnes explained, for example, that she derives her interpretation of her immune system based on the way her body reacted when she contracted dengue. Similarly, Rosalie and Daniel, a 57-year-old nurse, show that their understanding of their capacities to implement protective and preventive strategies is essential for their confidence in the face of adversity. Additionally, professional experiential knowledge about COVID is also critical in their decision-making processes and their experiences of the events due to the cases they observed at work and at home. For example, David, a 45-year-old psychiatric nurse, described that he has observed which category of the population ends up in intensive care.

Fear is therefore associated with individuals' representations of their vulnerability to the virus, which is in turn linked to their representations of their own immune system and epidemiological status, i.e., whether they are part of the 'vulnerable population' or not.

The social construction of fear in pandemic times

Fear is also related to public health discourses and health institutions where participants worked regarding the categorization of the vulnerable population and what constitutes being ascribed to an 'at-risk' group. Gaelle, a 51-year-old nurse who also teaches nursing, Sonia, Carolina, and several other participants describe how they derive their interpretation of which groups are to be considered vulnerable and consequently why they may not experience fear. In that sense, while participants were experiencing confusion, uncertainties, and in some cases, fear, the social and political categorization of which group was considered 'at risk' became a category most participants relied on to experience order in an otherwise disorderly context. Additionally, many participants describe how the media was responsible for creating an anxiety-inducing context. Fear was induced by the discourses in the media (ESD1 mentioned 'They were frightening us,' providing information about the number of cases and death toll). Sonia indicated that the media provided selective information, enumerating the COVID death toll while they never did so when it came to feminicide. Laurence mentioned she stopped listening to the media because it was too anxiety-inducing. Carolina also stated she didn’t listen to mainstream

media because it made her afraid. For Aida, media discourses exacerbated people's fears. Although this opinion was a minority, Jacques, a 70-year-old former nurse in a palliative ward remaining active as an external consultant, considered that the fear was fabricated by the 'people in charge' to gain greater control over the population and further a global political agenda which would enable them to have greater access to personal data and serve larger political goals.

DISCUSSION

Exploring the Foundations: Landmarks for an Anthropology of Fear

The concept of fear is frequently utilized in disciplines such as psychology, psychiatry, psychophysiology, neuroscience, etc., but it is not commonly analyzed from a socio-anthropological perspective. The global development of the socio-anthropology of emotions led to seminal texts in the anthropology of fear. Its genealogy can be traced back to an interest in 'the emotional' from humanities and social sciences (Lutz and White 1986, p. 431). One also ought to contextualize the anthropology of fear within a more established anthropological analysis of risks. Mary Douglas and Aaron Wildavsky (1982, p. 8) first introduced the notion that the perception and definition of risks vary across sociocultural contexts. The definition of risks is 'expressed through cultural conventions,' and what defines 'what constitutes a hazard or a risk' changes over time and cultures. The perception of risk is socially constructed, and 'a person will react to this constructed perception of risk' (Boscoboinik and Harokova 2014, p. 13).

Aiming for a socio-anthropological study of fear is relevant because 'fear is inherently social and relational (…) and the expression of fear, whether spoken or not, and the means by which people seek to address it both involve others' (Barker 2009, p. 267). As Boscoboinik describes it, fear is also a social experience resulting from sociocultural constructions (2014, p. 9), and as Scruton recalls, emotions are cultural creations, not individual ones (1986, p. 6). According to Jeudy-Ballini and Voisenat (2004, p. 56), 'formulating an ethnography of fear' allows us to understand essential

social and cultural concerns that are manifested through the collective expression of fear. Furendi also points out the importance of investigating fear as 'It is not hope but fear that excites and shapes the cultural imagination of the early twenty-first century' (Furedi 2007, p. vii).

However, conceptualizing an anthropology of fear has some challenges. Murray Li (2009, p. 363) reflects on the anthropology of fear asking, 'how do we link the contours of fear, that is, the political-economic conditions that produce and shape it, to the experience of fear?' Similarly, Edgar Morin assesses that establishing the boundaries of the concept of fear is not an easy task (1993, p. 131). Murray Li also questions how methodologically we can conduct an anthropology of fear with our usual tools when fear actually transpires in silences, vague associations, evasions, banalities, or bizarre events.

The Mediatic and Political Construction of Fear

Nurses in Switzerland who chose not to receive the COVID-19 vaccine exhibited a critical analysis of the situation, distancing themselves from prevailing norms and societal expectations. A key element of their critique was the observation that the overall context was fostering anxiety among the population. In particular, they scrutinized the media coverage of the pandemic, highlighting concerns about one-sided narratives in the mainstream media that contributed to the construction and amplification of fear.

What nurses describe as an anxiety-generating context aligns with the scholarly concept known as the 'culture of fear,' as elucidated by Masco (2006, p. 7). This concept, initially applied to phenomena such as global warming, terrorist attacks, and the War on Terror, has been expanded to encompass the global financial crisis.

Some nurses believe that fear is employed as a political instrument to achieve personal or organizational goals. Stéphanie Rolland-Train highlighted the pervasive fear experienced by individuals in Yugoslavia and its utilization as a 'political tool and instrument of power' (Rolland-Train 2014, p. 187). Nurses also take a critical stance by expressing skepticism about the advantages some may gain from the pandemic, such as pharmaceutical companies manufacturing vaccines or providers of masks. Horáková explores the development of the 'fear industry' in the context of South Africa (Horáková 2014, p. 27) while Furedi (2006, p. 56) discusses the emergence of 'fear entrepreneurs.'

Discourses framing and making intelligible a frightening world: The political construction of the vulnerable

Nurses who declined the COVID-19 vaccine generally concurred with the definitions provided by government and health institutions. These institutions offered clear delineations of the 'at-risk population'—individuals susceptible to contracting the virus. Clearly defined categories and public discourses play a crucial role in alleviating fear among both the general population and health professionals. Teresa Caldeira, in her work "City of Walls: Crime, Segregation, and Citizenship in São Paulo," explains that discourses serve as a tool for people to structure a frightening world and render it more comprehensible. Through discussions about crime, individuals gain insights into whom and what they should fear and the reasons behind it (2000, p. 19-101). Similarly, in the context of the pandemic, political and media discourses offer individuals frameworks to comprehend and impose order on a chaotic world.

Unvaccinated Nurses: The Other Polluting Us

In our context, several participants report being vilified, portrayed negatively, and in some cases stigmatized because they were perceived as dangerous. This resonates with what Appadurai termed the 'fear of small numbers' (2006, p. 8), indicating a fear of minorities. In this case, unvaccinated nurses, as a non-conforming minority, had triggered deeper fears. This closely aligns with Barker's statement, who describes,

'However, for those categorized as one of the threatening others, and for those who question whether or not they might be, this ordering of the world can itself lead to a great deal of fear' (Barker 2001, p. 30-43). The fear of the other may in some instances signify the fear of being incorporated or consumed by the other (Friedli 2009, p. 69), which according to Douglas finds its roots in the fear of the other polluting us (Douglas 1996, p. 6). In the case of COVID-19, the fear of being polluted and consumed manifested itself in the fear of the Other, specifically the non-vaccinated contaminating us with the virus. In the context of the cholera epidemic portrayed by Briggs and Briggs (2005, p. 9), the fear of infection resulted in exclusion and discrimination.

One could also hypothesize that the hostility felt towards them was intensified because among the medical personnel who refused vaccination, they belonged to the weaker class, making it easier to criticize the validity of their opinions and critical analysis. This aligns with Manderson & Levine's description (2020, p. 367) where they assert that 'COVID-19 will capitalize on structural violence (Farmer 2006, p. 99) and vulnerability (Quesada et al. 2011, p. 339), in which context people are at high risk of infection, vilification, and social exclusion.

CONCLUSION

Adams interprets the term “anticipation” as a way of thinking and living toward the future. He describes it as 'the palpable sense that things could be (all) right if we leverage new spaces of opportunity, reconfiguring 'the possible" (2009, p. 246). We suggest that the term may be understood differently. Anticipation is studied in various fields. In 2017, R. Poli published an Introduction to Anticipation Studies, consolidating the foundations of anticipation sciences. In the context of examining unvaccinated Swiss nurses against COVID-19, discourses and accounts of their experiences of fear from the perspective of an anthropology of fear, the notion of anticipation takes on another meaning.

Our participants describe developing their own modalities of anticipation. To alleviate anxiety triggered by the uncertainty of a crisis, they engage in self-evaluation of how their own bodies can respond. This involves interpreting their body's inner strength, a good “immune system” being the symbol of subjective corporal self-reliance. They also rely on their knowledge and beliefs in the efficacy of preventive measures they adopt, such as hand washing, distancing, changing clothes frequently, being cautious in touching their environment, practicing self-confinement, and undergoing regular testing. Their observations in the workplace contribute to these personalized strategies.

Even though they are not public health experts or epidemiologists, our participants draw on their professional experiential expertise. They leverage their practical skills to enforce preventive measures and rely on their experiential knowledge of their own bodies. We may characterize this as 'preventive vigilance,' aligning with Fainzang’s interpretation of the term 'lay pharmaceutical vigilance' (2014, p. 334).

REFERENCES

Adams, Vincanne, Michelle Murphy, and Adele E. Clarke. "Anticipation: Technoscience, life, affect, temporality." Subjectivity, vol. 28, no. 1, 2009, pp. 246-265.

Appadurai, Arjun. Fear of Small Numbers: An Essay on the Geography of Anger. Duke University Press, 2006.

Beck, U. Risk Society: Towards a New Modernity. Sage, 1992.
Beaud, Stéphane, and Florence Weber. Guide de l’entretien de terrain: Produire et analyser des données ethnographiques. La Découverte, 1997, p. 52.

Briggs, Charles, and Clara Briggs. Stories in the Time of Cholera: Racial Profiling During a Medical Nightmare. University of California Press, 2003.

Boscoboinik, Andrea. "Introduction. Risks and Fears from an Anthropological Viewpoint." The Anthropology of Fear: Cultures beyond Emotions, 2009, pp. 9-27.

Barker, Joshua. "Introduction: Ethnographic Approaches to the Study of Fear." Anthropologica, vol. 51, no. 2, 2009, pp. 267-272.

Caldeira, Teresa P. City of Walls: Crime, Segregation, and Citizenship in São Paulo. University of California Press, 2000.

Douglas, Mary, and Aaron Wildavsky. Risk and Culture: An Essay on the Selection of Technological and Environmental Dangers. University of California Press, 1982.

Douglas, Mary. Risk and Blame: Essays in Cultural Theory. Routledge, 1992.

Fainzang, Sylvie. "Managing Medicinal Risks in Self-Medication." Drug Safety, vol. 37, no. 5, 2014, pp. 333-342.

Friedli, Andrea. "‘If You Eat Dogs You’ll Eat People’: Otherising on a Greek Island in Economic Crisis." The Anthropology of Fear: Cultures beyond Emotions, 2009, pp. 69-85.

Furedi, Frank. Culture of Fear: Risk-taking and the Morality of Low Expectation. Cassell, 1997.

Giddens, Anthony. The Consequences of Modernity. Polity Press, 1990.

Horáková, Hana. "Culture and Politics of Fear and Violence in South Africa." The Anthropology of Fear: Cultures beyond Emotions, 2014, pp. 27-51.

Hirsch, Orit. "‘This Village is Going to Become a Gypsy Village’: Micro-ethnography of Fear Constructions in Two Romanian Post-Socialist Villages." The Anthropology of Fear: Cultures beyond Emotions, 2014, pp. 85-101.

Manderson, Lenore, and Susan Levine. "COVID-19 Risk, Fear, and Fallout." Medical Anthropology, vol. 39, no. 5, 2020, pp. 367-370.

Morin, Edgar. "Les anti-peurs." Communications, vol. 57, 1993, pp. 131-139.
Murray Li, Tania. "Reflections on the Ethnography of Fear." Anthropologica, vol. 51, no. 2, 2009, pp. 363-366.

Nader, Laura. "Anthropology of Law, Fear, and the War on Terror." Anthropology Today, vol. 33, no. 1, 2017.

Poli, Roberto. Introduction to Anticipation Studies. Springer Publishing, 2018.

Rolland-Train, Stéphanie. "Social Memory and Expression of Fear in the Current Modernity." The Anthropology of Fear: Cultures beyond Emotions, 2014, pp. 187-205.

Scruton, Roger. "The Anthropology of an Emotion." Sociophobics: The Anthropology of Fear, edited by Roger Scruton, Westview Press, 1986, pp. 7-49.

Tong, Allison, Peter Sainsbury, and Jonathan Craig. "Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups." International Journal for Quality in Health Care, vol. 19, no. 6, 2007, pp. 349-357.