

Vaccine Refusal: A Phenomenological Study on What Parents Think

Anne Babalar Çocukluk Çağı Aşılarını Neden Reddediyor: Fenomenolojik Çalışma

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ABSTRACT

Purpose: This study aims to identify the views of parents who refuse to vaccinate their children about the reasons for refusing childhood vaccines.

Method: This study utilized a phenomenological design, one of the qualitative research methods, and was conducted between April and June 2019. The sample, selected using maximum variation sampling among purposeful sampling methods, consisted of 15 individuals who had children and refused to have at least one childhood vaccine. Data were collected through the in-depth interview technique using a semi-structured interview form. The participants were informed about the purpose of the study, and their consent was received. Data were analyzed using content analysis methods.

Findings: Data collected from the study were grouped under six main themes. The participating parents were found to refuse vaccination due to reasons such as vaccine components, side effects of the vaccines, religious beliefs, inadequate information about vaccines, the notion that getting diseases or natural methods are better, and drug industry relationships of interest.

Conclusion: The main reasons for the parents to decide on vaccine refusal or support this view included inadequate information about vaccines, religious beliefs, vaccine components and side effects of vaccines, parents' perceptions about diseases, drug industry and relationships of interest. In addition, families were found to have a severe lack of knowledge about childhood vaccines and experienced information pollution.

Keywords: Vaccine, vaccine refusal, vaccination hesitancy, qualitative research

ÖZET

Amaç: Bu araştırma, çocuklarına aşı yaptırmayı reddeden ebeveynlerin çocukluk çağı aşılarını reddetme nedenlerini belirlemek amacıyla yapılmıştır.

Yöntem: Nitel araştırma yöntemlerinden fenomenolojik bir çalışma olarak gerçekleştirilen araştırma Nisan-Haziran 2019 tarihleri arasında yürütülmüştür. Çalışma grubuna amaçlı örnekleme yöntemlerinden maksimum çeşitlilik örnekleme kullanılarak çocuk sahibi olan ve en az bir çocukluk çağı aşısı yaptırmayı reddetmiş 15 kişi dahil edilmiştir. Araştırma verileri derinlemesine görüşme tekniği ile yarı yapılandırılmış görüşme formu ile toplanmıştır. Katılımcılara araştırma hakkında bilgi verilmiş ve onamları alınmıştır. Verilerin çözümlenmesinde içerik analizi uygulanmıştır.

Bulgular: Görüşmelerden elde edilen veriler altı ana tema altında toplanmıştır. Ailelerin aşuların içeriğinden ve yan etkisinden dolayı, dini inançları, bazı hastalıkların artışının aşıdan kaynaklandığını düşünme, aşular hakkında bilgi eksikliği, aşuların gerekli olmadığı düşüncesi nedeniyle aşı yaptırmayı reddettikleri bulunmuştur. Ayrıca bir hastalığın aşısının çocuğa yapılıp yapılmamasının kararında ailenin o hastalığa bakış açısının etkili olduğunu görülmüştür. Aileler sağlık hizmeti sunucularını önemli bilgi kaynağı olarak görmekte fakat onlardan yeterli bilgi alamadıklarında internet üzerindeki sosyal medya gruplarından faydalandıklarını belirtmektedir. Çocuklarına aşı yaptırmayan aileler bulaşıcı hastalıklardan korunmak için genellikle alternatif tıp uygulamalarını seçmişlerdir.

Sonuç: Ebeveynlerin aşı reddine karar vermeleri ya da bu düşünceyi desteklemelerinin temel nedenleri; aşular hakkında yeterli bilgi edinememe, dini inanışlar, aşuların içeriği ve yan etkileri, ailelerin hastalık algısı, ilaç endüstrisi ve çıkar ilişkileri şeklindedir. Ayrıca ailelerin çocukluk çağı aşuları hakkında ciddi bir bilgi eksikliği ve bilgi kirliliği yaşadıkları tespit edilmiştir. Çocukluk çağı aşuları konusunda ailelerin sahip olduğu eksik ya da yanlış bilgilerin öncelikle giderilmesi ve gerçek anlamda kapsamlı bir şekilde bilgilendirilmesi önerilir.

Anahtar Kelimeler: Aşı, aşı reddi, aşı tereddüdü, nitel araştırma

INTRODUCTION

Vaccines are one of the cornerstones of community health practices enhancing the improvement of health at the global level. The history of vaccines and immunization dates back to very old times; however, there have always been people who object to vaccines. Despite the evidence documented on the reliability, benefits, and success of vaccines, in recent years' vaccine refusal has been brought to the agenda again, and there has been an increase in the resistance in families particularly against childhood vaccines. Twenty years ago, the concepts of "vaccine hesitancy-vaccine refusal" have been put forward in the world, and the increased vaccine refusal cases have led to decreases in vaccination rates and increases in the prevalence of the diseases that can be prevented with vaccines. In 2018, there were 324.277 measles cases worldwide in total while this number was reported as 74.338 measles cases within the first two months of the year 2019 (1). Vaccine refusal has been encountered in our country within the past eight years, which indicated a sharp increase after a court case on receiving parents' consent for vaccination was won in 2015 and anti-vaccine statements began to be frequently seen on media. The number of families who refused to vaccinate their children were reported 183 in 2011, 980 in 2013, 5400 in 2015, 12000 in 2016, 23060 in 2017, and 40370 in 2018 (2).

The World Health Organization defines vaccine hesitancy as a delay in acceptance or refusal of vaccines despite the availability of vaccine services (3). The issue is regarded as a community health problem due to the increasing number of vaccine refusals. When the numbers of vaccine refusal cases have increased rapidly in recent years and demonstrated alarming levels, the World Health Organization placed "vaccine refusal" among the top 10 global health problems that are planned to be solved in 2019 (4). The Ministry of Health in our country has done some activities to provide more accurate information about vaccines and raise public awareness about vaccination.

One of the primary goals of the vaccine services is to protect vaccinated individuals from diseases; another purpose is to take the disease under control in the community by reaching a certain immunization rate. Although the vaccination decision initially seems to be an individual decision to be taken by parents, it is a social decision that affects other people as well. Parents' vaccine decision, which needs to be taken considering the child's high benefit, affects other people in society in various ways. The initial effect of vaccine refusal is to decrease vaccine rates and hence make the spread of diseases easy. This condition, which affects not only individuals who cannot be vaccinated but also the whole society, risks particularly the children for whom parents make decisions. Health professionals are natural defenders of vaccines, which is important for the social benefits of vaccines.

PURPOSE

Due to high numbers of increases in vaccine refusals, knowing about the reasons for vaccine refusal could contribute to solutions. Therefore, this study aims to identify the views of parents who refuse to vaccinate their children about the reasons for refusing childhood vaccines and to explore their opinions, thoughts, and experiences about this issue.

Research Questions

1. What are the parents' reasons for refusing childhood vaccines?
2. What are the factors affecting parents' childhood vaccine refusal?

METHOD

This study utilized a phenomenological design, a qualitative research method, to identify the views of parents who refuse to vaccinate their children about the reasons for refusing childhood vaccines. The study was conducted between April and June 2019. The sample consisted of 15 participants (P) who were selected using maximum variation sampling among purposeful sampling methods from individuals who were reported to have refused at least one childhood vaccine according to the registers of Adana Provincial Directorate of Health. No limitations were indicated in terms of age, education level, and working variables to enrich the study data.

Data were collected through a semi-structured interview form and questionnaire that aimed to obtain data about the participants' socio-demographic characteristics. Content validity of the data collection tool was enhanced by receiving expert views of two instructors, one is an expert on qualitative research and the other one on midwifery, and revisions were made based on their recommendations. A pilot administration was performed to improve the comprehensibility and practicality of the interview form. The interviews were conducted in places suggested by the participants where they would have no difficulties in terms of transportation. The participants were informed about the study, and their written and verbal consent was obtained. The interviews were recorded with a voice recorder, and each interview was completed in about 40-50 minutes.

Data were analyzed using content analysis methods. The participants' voice recordings were transcribed in a Word document, and 73-page raw data were obtained. Before data coding was started, each interview was read line by line to have a holistic picture of the data. The texts written in these documents were coded based on words according to the categories identified. The study process was explained in detail to enhance external validity. The participants' statements in their responses were presented without making any changes. The data were described systematically and clearly, and the descriptions were organized and interpreted.

Approval was obtained from the Non-invasive Clinical Studies Ethics committee at the Medical Faculty of Çukurova University and written permission was obtained from the institution. In addition, the participants were met before the interviews and given information about the study, and their written consent was received before the interviews were conducted.

FINDINGS

The participating parents were aged 24-36, all of them were females, and their professions and education levels demonstrated differences.

The reasons for vaccine refusal that were indicated in the interviews were grouped under six themes as follows:

1. Vaccine refusal due to vaccine components
2. Vaccine refusal due to the side effects of the vaccines
3. Vaccine refusal due to religious beliefs
4. Vaccine refusal due to inadequate information about vaccines
5. Vaccine refusal due to the notion that getting diseases or natural methods are better
6. Drug industry relationships of interest

1. Vaccine Refusal Due to Vaccine Components

The majority of the participating parents think that the substances used during the production stage of vaccines were harmful, and the methods used in the production stages caused some health problems. This notion reveals itself as an important cause of negative views about vaccines.

Some substances are included in the vaccines in line with certain purposes. Among these, mercury and aluminum are the two substances that cause a lot of debate and anxiety. Thiomersal, which is a derivative of mercury used as molecule protectives, is the most common reason for vaccine refusal and was removed from most childhood vaccines as a precaution in 2001, and vaccines containing no thiomersal have begun to be produced (5). On the other hand, evidence-based studies on the issue were conducted and shared with the public. However, families seem to be still confused about vaccine and mercury components.

"... They say we take mercury with fish, too. Let's not take it, either; let's try not to eat deep-sea fish...I do not make my child eat things that we do not know what they contain. Therefore, I am not vaccinating my child..." (P5).

"... We ate and drank so many harmful things in our childhood, but we decided to be careful about my daughter; I decided not to give her anything with a suspected component that might do harm. While looking for things with this purpose in mind, I learned from a halal food website that vaccines contained mercury. At first, I thought that they were exaggerating, but the reality was evident. Here is how my anti-vaccination story began" (P8).

"We know what mercury in vaccines is causing" (P9).

Adjuvants are other substances accused of vaccine components. Studies measuring the aluminum levels in vaccines have begun to be conducted as a result of the statements indicating that various muscle problems are experienced due to the accumulation of aluminum components in the body. Although these studies indicated the reliability of the vaccines, the participants still consider it as a reason for vaccine refusal.

"...Aluminum is not very different from mercury. It is also a heavy metal. That's why I did not vaccinate my child. I would do the same if I had another child" (P3).

"...Compulsory childhood vaccines contain heavy metals that could hinder the child's development and cause more severe damages. The most famous ones include mercury and aluminum" (P7).

2. Vaccine Refusal Due to The Side Effects of the Vaccines

The Ministry of Health issued a circular letter in 2009 and defined unwanted effects after vaccination. This definition was as follows: "an unwanted effect after vaccination (UEAV) is a known side effect of a vaccine or any unwanted medical condition that is considered to develop after vaccination in an individual who is vaccinated." This circular letter also contains frequent and rare side effects after vaccination reported by the Ministry of Health (6).

The majority of the participants reported their experiences and observations about the side effects of the vaccines, which were found to have effects on their decision not to vaccinate.

“...My child generally started to get sick very often after that vaccination process, particularly after the first-year vaccine” (P4).

“... We think that vaccines are the cause of my daughter’s frequent illnesses. Although we are very careful, my daughter has illnesses such as flu and common cold very frequently. Her fever increased up to 40,3 and 39,5. She also experienced vomiting and weakness...” (P1).

“...We know children who had infantile paralysis after they had polio vaccine; that one is also problematic...” (P15).

3. Vaccine Refusal Due to Religious Beliefs

The participants who refused vaccines due to religious beliefs were divided into two categories. While one group thinks that the vaccine components are unfavorable in terms of their religious beliefs, the other one thinks that there is no need to be protected from diseases because diseases come from God and one should trust in God.

“...If it is the destiny by God, you get that disease no matter what you do. If not, you do not get it” (P2).

Some of the parents were found to think that vaccine components were not halal in terms of religion. This view was more frequently mentioned than the view that regarded diseases as destiny.

“...Things in vaccines are full of substances considered necis (dirty) by Islam. I think injecting a 3-month or 1-year old child dirty things such as monkey kidney, mouse cell, or pig whatever is simply not right...” (P13).

“... Of course, religious perception is important. Some people do not want vaccines that contain pig genes and monkey genes; they think so because they are forbidden by religion rather than they are potentially harmful” (P12).

In addition to these views, some participants stated that health professionals demonstrated negative attitudes towards them about their vaccine refusal decision due to their religious beliefs and the clothes they were wearing in line with their beliefs.

4. Vaccine Refusal Due to Inadequate Information About Vaccines

Families who were hesitant about vaccines stated that they wanted to make informed decisions for their children about vaccines by learning about the benefits and risks of vaccines. The participants reportedly saw health professionals as a valuable source of information about their children's health. However, they also stated that the health professionals did not inform them adequately before vaccination, it was not easy to talk with health professionals, and health professionals did not have time to communicate with parents.

“...I was called by the Community Health Center constantly; they sent some people to our home and took the statement down. However, we were not given any worthwhile information about what happens if the child gets ill if s/he is not vaccinated; only one pediatrician said something unqualified like you brought trouble on you” (P1).

When they cannot obtain the necessary information from health professionals, parents start to look for information from other information sources, which affects their vaccine decisions.

“...I came across a Facebook group and things I read there sounded logical. I benefitted from only that group. I think that they follow a sufficient number of articles, share examples from children, and follow current news. I was convinced by the statistics about allergy, autism, and immune system disorders that were reported after vaccines. I was convinced because they gave real-life stories... We are not informed by health professionals about the vaccine components adequately” (P8).

Negative views of the participants about vaccines were significantly affected by their social environment, internet, newspaper and television news, national and international web sites they follow, social media groups, and the things

shared in these groups. After the internet, families were found to have been affected by their close friend circles and relatives mostly when they obtained information about vaccines.

5. Vaccine Refusal Due to The Notion That Getting Diseases or Natural Methods Are Better

The majority of the participants stated that pulling through diseases naturally is better and enables a stronger immunization, immunization enabled with vaccines is inadequate, and it is better to pull through some diseases naturally during childhood. Parents' views about the disease were found to have effects on their decision whether or not to vaccinate their children against that disease.

"...Vaccines are not for protection; namely, it does not mean that a child who is vaccinated does not get this disease. Similarly, it does not mean that the diseases experienced by vaccinated children are not experienced by children who are not vaccinated. I think those who are not vaccinated pull through more easily. I am vaccinated for flu; it takes me one week to pull through. My daughter finishes the process in 3 days" (P5).

Some parents believe that for children, natural immunization is better than the immunization obtained through vaccines. The common view shared by the participating parents was that pulling through a disease could help to strengthen the child's immunization.

"...We should enable natural immunization. Natural social immunization is more effective than the social immunization enabled by vaccination. Natural immunization protects much more than immunization by vaccination" (P2).

"...Common diseases are not my fear. No mothers would want to see their children get ill, of course. As a mother, I do not want my child to get ill. But I think that pulling through diseases such as measles, epidemic parotitis, and chickenpox is better for her immunization" (P7).

The participating families stated that their decisions about not to vaccinate their children were affected because they remembered themselves as children who pulled through these diseases easily and they saw them as diseases to be experienced by all children during childhood.

"... Well, it was the same when we were children. They used to put us in the same room with children who had chickenpox so that we could also get it. We used to have all these diseases. The risk is greater if you get them when you grow up" (P6).

While searching about vaccines, some parents also searched about alternative treatment methods and were affected by the views of alternative medicine practitioners about vaccines. The participants think that the things they did for children had positive effects on protecting their children's health and advocate that vaccines are not needed. For instance, they report that having a natural diet is sufficient.

"...Well, I believe the importance of the natural diet. I mean, it is not easy. It is not easy to find and afford it. But when you put unnatural things in your body, it reacts accordingly. As much as possible, you should eat natural things. The body has a protection mechanism. This is what we are doing now, trying to consume natural things as much as possible" (P11).

Some of the participants stated that vaccines are partly or completely unnecessary. The childhood vaccines they commented on included polio, hepatitis B, meningitis, and combination vaccines. They had the perception that the vaccine components having protectors for more than one disease caused more side effects.

"... I still have my own vaccine card; my mother had kept it. I had a very heavy measles although I had been vaccinated. I remember it" (P4).

6. Drug Industry, Vaccines, And Relationships of Interest

The participants reported to have the issue of trust about obtaining and financing vaccines. The common view of the participants who reportedly did not trust drug companies and the health sector is caused by the notion that vaccines are seen as a monetary source.

“...Compulsory childhood vaccines are a system invented by drug companies to earn money. This is my opinion... The purpose is not to protect children; it is conflicts and interests... it is the performance money for doctors and midwives who do the follow-ups. More vaccines mean more money” (P7).

In addition to the lack of trust in drug companies and the belief that they earn money through vaccines and thus there is bias about this, the foundation of these views also includes more complicated opinions like the use of vaccines as weapons of mass destruction.

DISCUSSION

This phenomenological study explored parental attitudes toward childhood vaccine refusal, identifying six central themes: concerns about vaccine components, fear of side effects, religious beliefs, inadequate information, preference for natural disease progression, and distrust towards the pharmaceutical industry. These findings are consistent with existing literature addressing the multifaceted nature of vaccine hesitancy (7-9).

Parental concerns regarding vaccine components, particularly thiomersal (a mercury derivative) and aluminum, were prominent. Scientific evaluations have consistently demonstrated that the levels of aluminum and former thiomersal use in vaccines are safe and do not pose a health risk to children (10). Nonetheless, misinformation continues to circulate, particularly through social media platforms, exacerbating parental fears.

Reported adverse events following immunization, such as fever and vomiting, also fueled vaccine hesitancy among participants. It is critical to distinguish between common, mild side effects and true vaccine-related adverse events. Mild reactions are anticipated and indicative of the immune system's appropriate activation (11). Severe adverse events are exceedingly rare and, when considering the morbidity and mortality associated with vaccine-preventable diseases, the benefits of vaccination overwhelmingly outweigh the risks (4).

Religious beliefs emerged as another influential factor. Some participants expressed concerns regarding the use of non-halal substances in vaccines, while others regarded disease occurrence as a matter of divine destiny. The WHO has worked collaboratively with religious leaders to address these misconceptions, emphasizing that vaccines are compatible with Islamic teachings and do not conflict with religious principles (12).

The findings also underscored a pervasive lack of adequate information. Participants reported insufficient counseling from healthcare professionals, leading them to seek information from non-validated online sources. Research has shown that misinformation proliferates rapidly on social media, contributing significantly to vaccine hesitancy (13). This highlights the necessity for healthcare providers to deliver clear, accessible, and empathetic communication to parents, ensuring informed decision-making.

A notable portion of participants favored natural immunity, believing that recovering from infectious diseases conferred stronger, more lasting immunity than vaccination. However, natural infection often carries significant risks, including severe complications and death, as exemplified by diseases like measles (14). Vaccination offers a safer and equally effective means of establishing immunity without exposing individuals to the dangers of natural infection.

Finally, distrust towards pharmaceutical companies was widespread among participants, many of whom perceived vaccination initiatives as profit-driven rather than health-oriented. While vigilance regarding conflicts of interest is warranted, vaccine development and approval processes are rigorously regulated by independent health authorities, ensuring that public health interests take precedence (15).

Overall, this study demonstrates that vaccine refusal is deeply rooted in misinformation, distrust, and communication failures rather than in evidence-based concerns about vaccine safety or efficacy. Addressing these issues necessitates a multidimensional public health strategy.

CONCLUSION

The main reasons for the parents to decide on vaccine refusal or support this view included inadequate information about vaccines, religious beliefs, vaccine components and side effects, parents' perceptions about diseases, the drug industry and relationships of interest. In addition, families were found to have a severe lack of knowledge about childhood vaccines and experienced information pollution. Understanding the importance of social immunity and bearing this responsibility belong primarily to health professionals, and midwives, who mainly work in primary care health services, should be natural defenders of this issue.

It is therefore highly important to plan awareness-raising initiations and trainings in health institutions providing health care service to eliminate lack of knowledge and informational convergence in society about this issue. Media was found to have serious effects on the participating parents, who were affected by the negative news about vaccines. Therefore, disseminating comprehensible, clear and effective information about vaccines and increasing the amount of this kind of information could have effects on creating positive perceptions about this issue in society. Implementing a holistic, empathetic, and evidence-based approach is critical to reversing vaccine hesitancy trends and safeguarding both individual and public health.

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