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Non-confidential

A helping hand to vaccine-hesitant parents

How to help vaccine-hesitant parents gain confidence in vaccinations and make a better informed choice

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Table of content

1. Organizational & Project context	5
2. Research strategy	8
2.1 Objective.....	8
2.2 Research framework	8
2.3 Research perspective	9
2.4 Research questions.....	11
2.5 Methodology	12
3. Results – Communication GGD	13
3.1 Online communication	13
3.2 Offline communication.....	17
4. Results communication of anti-vaccinators	20
4.1 Websites.....	20
4.2 Facebook groups	24
5. Results of questionnaires	28
5.1 Questionnaire of parents	28
5.2 Questionnaire of doctors	31
6. Discussion of results	34
7. Conclusion and recommendations.....	34
8. Advice	36
8.1 A place for vaccine-hesitant parents.....	36
8.2 Address the misconceptions	39
8.3 Credibility check-list	41
8.4 Meetings about vaccinations	42
8.5 Planning implementation of advice.....	44
References.....	45
Appendix.....	46
I. Questionnaire Parents.....	51
II. Questionnaire doctors.....	54
III. Outcomes questionnaire parents.....	57
IV. Outcome questionnaire doctors	60
V. Content on the website of GGD Groningen	64
VI. Content on the website of Rijksvaccinatieprogramma.....	66
VII. Content on the website of the RIVM	69

VIII. Analysis letters	73
IX. Facebook page of GGD Groningen	73
X. Twitter page of GGD Groningen and JGZ	73
XI. Content on the website of NVKP	76
XII. Content on the website Vaccinrij	82
XIV. Facebook page of Vaccinatiegekte.....	90
XV. Facebook page of Vaccinatietwijfelaars.....	106
XVI. Letters sent to the parents.....	124
XVII. Notes and analysis consults doctor- Parents	128

Executive summary

A helping hand to vaccine-hesitant parents is the final product of a research executed for GGD Groningen and the municipality of Groningen. This research is executed because the GGD noticed an increasing number of responses and questions from parents who got worried as a result of negative stories circulating about vaccinations. The fact that vaccinations have become a victim of its own success (ECDC, 2012) has led to an increase in the popularity of anti-vaccination movements, and with the ease of communication means such as the internet and social media, these groups are able to reach a big audience. Currently the vaccination degree is not yet declined, but in order to prevent this in the future and to know how to cope with anti-vaccinators, this research was implemented.

The objective of this research is to provide recommendations to the GGD on how they can help vaccine-hesitant parents gain confidence in vaccinations and make a better informed choice. In order to achieve this objective, the communication of the GGD and anti-vaccinators is analysed and a questionnaire amongst parents is conducted to learn from their experiences and perceptions. The analysis is based on key-concepts which are considered as important elements for the parents to gain confidence in vaccinations, but also environmental key-concepts which could reinforce or weaken the confidence in vaccinations.

The analysis of the online communication of the GGD in combination with the questionnaire amongst parents, showed that the information provided online does not meet the needs of vaccine-hesitant parents. Information was missing such as a the risks of not vaccinating Besides that the information which the GGD provided was rather basic and explained shortly, like the information given about the diseases for which the GGD vaccinates. Many parents indicated in the questionnaire the limited information is a reason for them to look elsewhere for additional information.

Besides the online communication of the GGD, also the letters sent to parents by the GGD and parent-doctor consults are analysed by means of the key-concepts. Especially the consults met all key-concepts and many parents also indicated that they value the opinion of their doctor highly. Which makes doctors an important opinion leader, a role of which many doctors working at the GGD are aware. However during the consults, the focus is not solely on vaccinations, and many doctors indicated that they do not always have time to elaborate as much on vaccinations as they sometimes ought to be needed.

The communication of anti-vaccination movements mainly lacked on transparency and credibility, which can be blamed to the fact that often information is neglected on the websites and sources without credibility are used. The best example of this is that the research of Wakefield et al. (1998) is still presented as a credible and truthful source, despite the fact that this research is retraced in 2012. Overall the parents disagree with the arguments provided by the anti-vaccination movements. However they indicated they would like a response of the GGD to circulating stories about vaccinations, as currently little response is given to this.

Overall the research gave fruitful insights on which the following recommendations are based:

The GGD is recommended to offer a place to vaccine-hesitant parents where they can find more objective unbiased information about vaccinations from multiple perspectives.

Extra and objective information should be provided to parents, which can be distributed by means of the internet or the development a special brochure for parents who want to know more about vaccinations. The main goal is to satisfy parents in their needs of more information and to prevent them from drifting off to websites like the NVKP and Vaccinvrij. Current information has to be extended

with emphasis on the following topics: More in-depth information about the vaccinations self, more information about the diseases, information about the risks of not vaccinating and the bigger perspective of vaccinating

The GGD is recommended to address the misconceptions about vaccinations and the statements made by the anti-vaccination movements and explain the story behind this misconception.

Many of the circulating stories and misconceptions about vaccinations remain unanswered, despite the fact that parents would like to see a response to the misconceptions from the GGD. The GGD should respond to the general misconceptions but also to vaccination-related events. The misconceptions can be addressed in three steps: 1. describing the misconceptions, 2. explaining where the story comes from, 3. describing the truth.

The GGD is recommended to provide a check-list to parents, on how they can assess the credibility of a source.

Many parents said to look for information elsewhere, however not all sources they might find are credible. Therefore the GGD should offer a check-list to parents in order to assess the credibility of a source. By means of a short list which is easy to use parents can find credible sources about vaccinations their selves.

The GGD is recommended to introduce monthly meetings where the topic vaccinations will be discussed into deep with parents and where parents can ask questions and share their concerns.

The parents-doctor consults prove to be very effective, however doctors don't always have time to elaborate on vaccinations. These meetings aim for investing extra time in vaccine-hesitant parents and herewith stimulating their confidence in vaccinations. Vaccinations are the central topic during the meetings and parents have the opportunity to share their questions and concerns with each other and a professional.

1. Organizational & Project context

Organizational context

This graduation assignment is destined for the GGD Groningen and the municipality of Groningen. GGD is an abbreviation for 'Gemeentelijke Gezondheidsdienst', which means: municipal health service. In other words, a service which is offered by the municipality in order to maintain public health. Additional to the fact that the GGD is a service offered by the municipality of Groningen, the municipality also advises the GGD on its communication. GGD Groningen (henceforth named GGD) is active in 23 municipalities in the province of Groningen, with a total of 450 employees. The organization offers public healthcare to various selected groups which are divided as follows: youth and upbringing, infection diseases and hygiene, sexuality, environment and health, research, forensic medicine and travel vaccinations. All of the abovementioned areas strive to achieve one main goal: to protect and improve the health of the inhabitants of the province of Groningen.

Project context

Globally, public health organizations are facing a communication challenge, a challenge which is partly caused by national vaccination-programmes because they: *"became a victim of its own success, as the vaccine-preventable diseases have become so rare, that people fail to realise the benefits of immunisation"* (ECDC, 2012). This has resulted in several outbreaks of vaccine-preventable diseases worldwide and a situation where anti-vaccination movements gained more visibility and influence, a trend which is also observed in the Netherlands.

In the Netherlands the group of people who are against vaccinations (anti-vaccinators), is fairly small and therefore not instantly a risk-factor to the public health, as there is a so-called herd immunity. However as mentioned, anti-vaccinators have become more visible and influential, with an extensive reach as they mainly use social media and websites to resonate their thoughts, however they also confront people in their private environment on this topic. The arguments used by anti-vaccinators are usually not backed by scientific data and vary greatly, yet they cause commotion and uncertainty among many parents whom are still doubting whether to vaccinate their child or not (vaccine-hesitant parents).

In the Netherlands the GGD is responsible for vaccinating children against twelve infection diseases. Vaccinations are not mandatory in the Netherlands but they are highly recommended by the GGD and Dutch government. Despite the fact that vaccinations are not mandatory, the vaccination rate is rather high with 95% of the infants, and 90% of the children being vaccinated in consecutive phases. The vaccinations are part of the national vaccination programme and are accessible for every social class since they are free of charge.

GGD Groningen receives an increasing number of responses and questions of parents who are getting worried as a result of the commotion stirred up by anti-vaccination movements. There is not (yet) a visible decline in the vaccinations, however, the GGD would like to know how they can establish their communication concerning child vaccinations in order to stimulate the confidence of vaccine-hesitant parents and hereby simultaneously limit the influence of anti-vaccination movements.

1. Research strategy

2.1 Objective

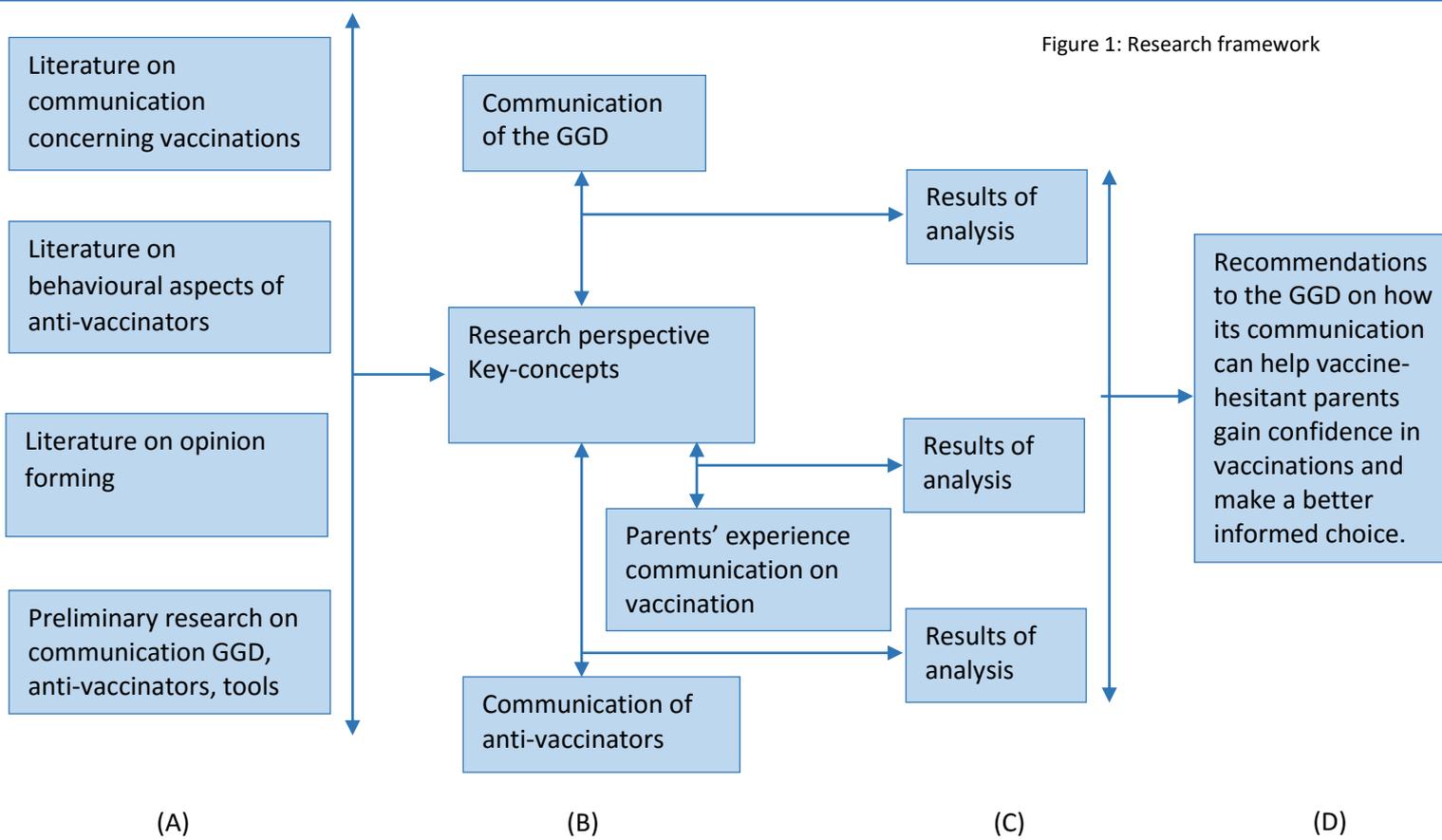
It is important to note that this research is not aimed at changing the opinion nor communication of anti-vaccinators, but on how the GGD can adjust its communication in order to offer help to vaccine-hesitant parents. This research is practice-oriented which means that an intervention will be developed in order to solve a practical problem (verschuren & Doorewaard, 2010). The outcome of this research will be design-oriented since it provides recommendations to the GGD on how to establish its communication. Even though the intervention of this research is the third step of the intervention cycle: design, it is important to realize that the prior two steps (problem analysis and diagnosis) are of equal significance. As in order to proceed to the third step, the former two steps have to be completed successfully. The objective of this research is as follows:

To provide recommendations to the GGD on how they can help vaccine-hesitant parents gain confidence in vaccinations and make a better informed choice by making an assessment of the communication of the GGD and anti-vaccination movements supported by a questionnaire among parents in order to clarify, how the GGD can adjust its communication, what can be learned from the communication of anti-vaccinators and what parents desire from the communication of the GGD.

2.2 Research framework

The research framework (figure, 1) is a schematic representation of the steps that have to be taken in order to achieve the research objective. It provides insight in how the different phases of the research are interconnected and how one step implies the other (Verschuren & Doorewaard, 2010). Every phase builds upon another, therefore it is crucial to complete a phase before continuation to the next. Please find a textual description of the research framework on the next page.

Figure 1: Research framework



The research initiates at phase A, a review of scientific literature and preliminary research. Preliminary research refines the theoretical insights from the scientific literature and adapts the insights gained from the literature review to the research at hand (Verschuren & Doorewaard, 2010). The three selected theoretical areas are considered as essential in the light of this research. Literature on communication concerning vaccinations provides insight in important elements of communication about vaccinations and on what aspects parents form their opinion. The second theoretical area; literature on behavioural aspects of anti-vaccinators, helps to understand anti-vaccinators and how their behaviour influences the environment. The final theoretical area; literature on opinion forming, entails on what people base their opinions. The conclusion of phase A constitutes the research perspective. There are no intercultural aspects integrated in this framework, as preliminary research pointed out that the problem is not caused by, nor affects, a group with specific cultural similarities, wherefore intercultural sensitivity is not considered relevant.

The research perspective gives an angle of approach towards the research objects of phase B and demarcates the research. The first object is the communication of the GGD, the key-concepts function as a tool to analyse and assess its communication. The second object is the communication of the anti-vaccinators, which will be analysed and assessed with the key-concepts, in order to learn from their communication and to understand how their influence can be limited. The third object are the parents, where the focus lays on their experience with communication about vaccinations. Altogether these objects constitute the most important senders and receiver of communication in this research.

When the objects are studied, phase C initiates; results of analysis. The objects will be confronted with each other, to learn about their similarities and differences. From this a conclusion can be drawn, which leads to the final product, phase D; the communication advice to the GGD.

2.3 Research perspective

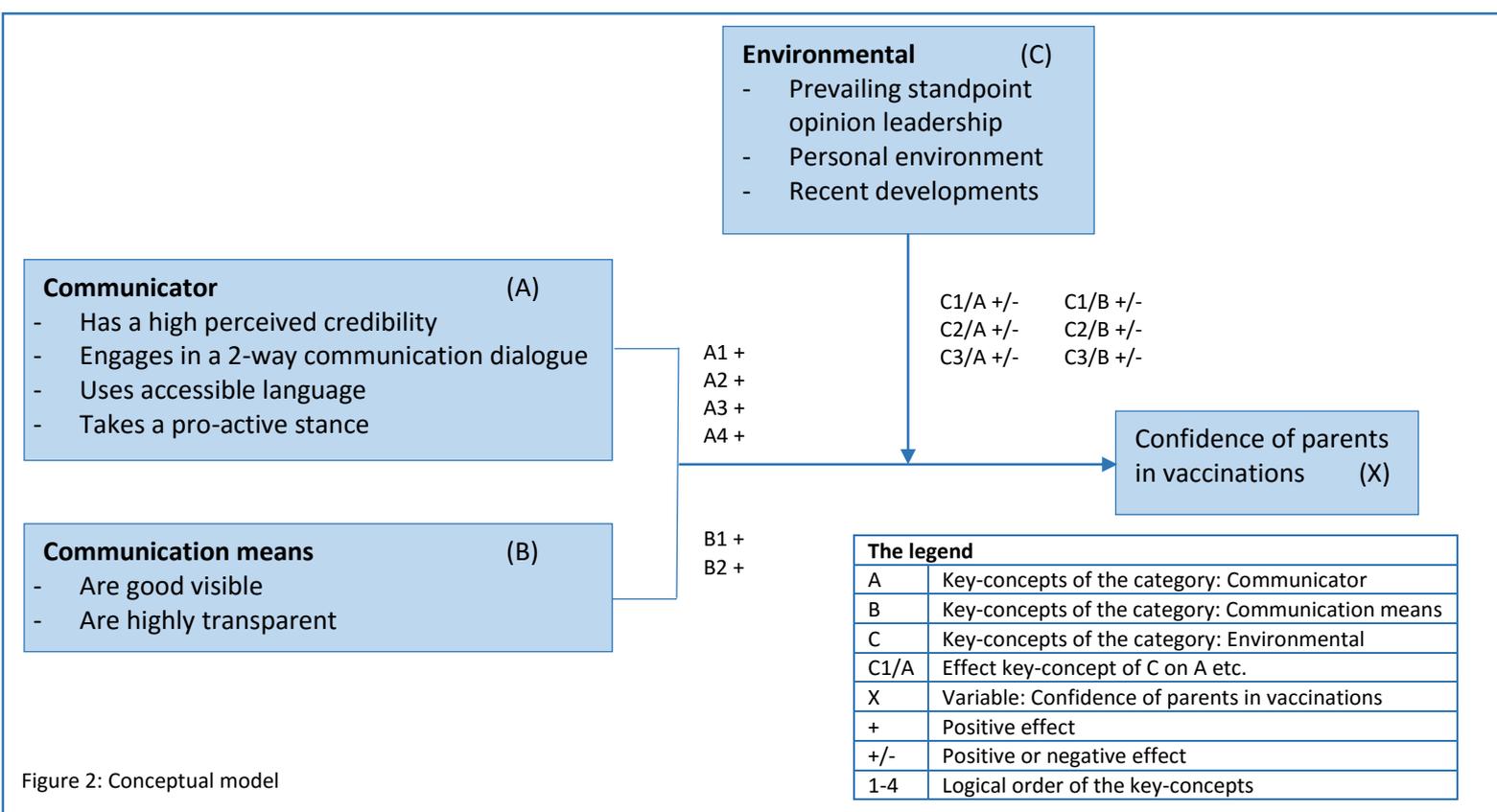


Figure 2: Conceptual model

The research perspective (figure 2), consists of key-concepts as derived from the theoretical areas, and have an effect on the variable; confidence of parents in vaccinations. Altogether the key-concepts will be used for the analysis and assessment of the objects. The key-concepts are sub-divided in three categories, which are based on the basic communication model; the communicator relates to the sender, communication means relates to the channel and environmental to noise. Table 1, elaborates on the relationships between the key-concepts and the variable.

Relationship	Assumption
A1	A 'high perceived credibility' has a positive effect on the 'confidence of parents in vaccinations' as it increases the value parents attach to the information distributed.
A2	A 'two-way communication dialogue' has a positive effect on the 'confidence of parents in vaccinations', as the era where people take information for granted is over, and parents highly appreciate it if the time is taken to discuss the risks and the procedure (Leask et al, 2006).
A3	The 'use of accessible language' has a positive effect on the 'confidence of parents in vaccinations', as a language barrier may appear since doctors and parents may attach a different signification to the same word (ECDC, 2012) this can be prevented by using different words or story-telling.
A4	A 'pro-active stance' has a positive effect on the 'confidence of parents in vaccinations', in order to respond fast to events and by being up-to-date the communicator is aware of the arguments vaccine-hesitant parents might use.
B1	'Good visibility' has a positive effect on the 'confidence of parents in vaccinations' as generally internet is consulted first, with good visibility parents don't acquire information elsewhere. (University of California, 2012)
B2	'High transparency' has a positive effect on the 'confidence of parents in vaccinations' as parents trust the information more when the full picture and intentions are given and parents don't have to look elsewhere for more information.
C1/A	The effects the key-concepts of A have on the variable X are dependent on the 'prevailing standpoint opinion leadership', this can have a negative as well as positive influence on the effectiveness of A, but this depends of the standpoint taken by the opinion leader.
C2/A	The effects the key-concepts of A have on the variable X are dependent on the 'personal environment', this can have a negative as well as positive influence on the effectiveness of A, but this depends of the standpoint of the personal environment.
C3/A	The effects the key-concepts of A have on the variable X are dependent on the 'recent developments', this can have a negative as well as positive influence on the effectiveness of A, but this depends of the development and also how the communicator responds to this development. For instance the case of diphtheria in Belgium (2016) can benefit or harm the efforts of the communicator.
C1/B	The effects the key-concepts of B have on the variable X are dependent on the 'prevailing standpoint opinion leadership', this can have a negative as well as positive influence on the effectiveness of B, depending on the standpoint taken by the opinion leader. As it can increase the visibility and transparency or decrease this.
C2/B	The effects the key-concepts of B have on the variable X are dependent on the 'personal environment', this can have a negative as well as positive influence on the effectiveness of B, but this depends of the standpoint of the personal environment.
C3/B	The effects the key-concepts of B have on the variable X are dependent on the 'recent developments', this can have a negative as well as positive influence on the effectiveness of B, but this depends of the development, as this development may make the communication mean appear more or less visible and transparent.

Table 1: Relationships key-concepts & confidence of parents in vaccinations

2.4 Research questions

The research questions are based on the knowledge that is required in order to achieve the objective.

Central question 1:

What are the key-concepts that influence the confidence of parents in vaccinations through communication?

Central question 2:

By means of the key-concepts what can be concluded from the analysis of the communications of the GGD and anti-vaccination movements?

1. To what degree does the communication of the GGD meet the key-concepts?
2. To what degree does the communication of the anti-vaccination movements meet the key-concepts?
3. Does any of the categories as described in the research perspective; communicator, communication means and environmental, have a prevailing role in the communication of the GGD and the anti-vaccination movements?
4. How do the parents experience the communication of the GGD in the light of the key-concepts?
5. How do the parents experience the communication of the anti-vaccination movements in the light of the key-concepts?

Question one and two provide insight in the communication means of the GGD and anti-vaccinators and whether the key-concepts are integrated in its strategy. Additionally question two can give fruitful insights about the techniques used by anti-vaccinators and information on how the GGD can limit its influence. Question three shows whether one category is applied more in the communication of the objects, and can indicate whether this should be changed or not. The final two questions firstly complete the full image of the communication of the two objects and might add some missing information and moreover it provides insight in how parents assess the communication.

Central question 3

What can be learned of comparing the results of the analyses from the communication of the GGD and anti-vaccination movements, in order to advice the GGD on how they could establish its communication aiming to stimulate the confidence of vaccine-hesitant parents and hereby limit the influence of anti-vaccinators?

1. What are the insights, as derived from the analysis of the communication of the GGD?
2. What are the insights, as derived from the analysis of the communication of anti-vaccinators?
3. What are the insights, as derived from the experience of the parents?

The insights from the analysis of each object, and the comparison hereof will lead to answering the objective.

2.5 Methodology

The nature of this research is inductive, as no theories are tested in this research, but by means of research questions data is collected in order to provide recommendations for the communication of the GGD. The data will be gathered through an analysis on the basis of the key-concepts, of the following three objects: the communication of the GGD, the communication of the anti-vaccination movements and the parents. For each of these objects different methods will be applied in order to collect the correct data which help towards providing the recommendations. In this chapter the methodology of the collection of data for each different object will be explained.

Communication of the GGD

The GGD is responsible for different areas concerning public healthcare and therefore communicates about different topics. As for this research only the communication on vaccinations is relevant, only this will be taken into account. The communication about vaccinations is sent through various channels, and to gain a full insight into the communication of GGD on vaccinations, all these channels will be analysed. The majority of these channels are accessible as they can be reviewed online (websites, Facebook, Twitter, brochures) or requested at the GGD (letters sent to parents). But besides these methods, also personal contact takes place between the doctors of the GGD and parents, by means of the parent- doctor consults in health centres. Because the consults are private and therefore harder to assess than the aforementioned methods, it will be analysed in three different ways. First of all a questionnaire among the doctors of the GGD will be conducted to understand how they perceive their contact with parents and their role in these consults, but also their observations and experiences related to vaccine-hesitant parents is relevant. Besides this, the consults will be observed and analysed by accompanying Doctor Paulien Voskuil for a day at the health centre. Additional to this, the questionnaire among parents will complete the information as one of the aims of this questionnaire is to learn about the perception and experience of parents with the GGD.

Communication of anti-vaccination movements

The second object of this research is the communication of the anti-vaccination movements. They primarily communicate online through social media and websites, but the questionnaires among parents can contribute to an insight in the personal communication of anti-vaccinators. In order to learn about the communication of anti-vaccinators, two very active and popular websites will be analysed: NVKP and Vaccinvrij. Moreover the two most active and popular Facebook groups will also be analysed, the Facebook groups will be analysed over a period of one month (March 18 – April 18). By analysing the communication of anti-vaccinators, information can come forward of what is missing about the communication of the GGD but also whether a response to anti-vaccinators should be integrated or not. Therefore it is chosen to also focus on the communication of anti-vaccinators.

The parents

The last object in this research are the parents, and as aforementioned, a questionnaire will be conducted in order to gain insight in the perception and experiences of parents related to communication on vaccinations. The questionnaire will provide insight in the experiences and perceptions of the parents about the communication concerning vaccinations. It is important to know this, since the parents are the receiving group of the communication, the communication of the GGD and anti-vaccination movements are destined for the parents. The questionnaires will be distributed to the parents through the health centres, this does not affect the diversity of the group, as parents don't only come to the health centres for vaccinations but for their child's general development.

2. Results – Communication GGD

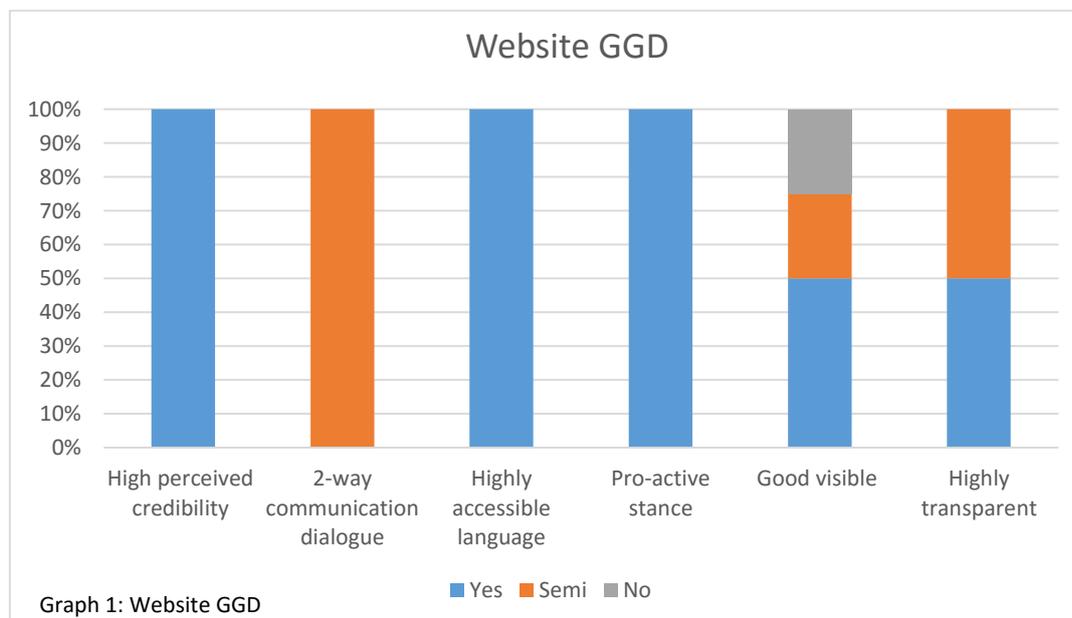
The GGD communicates through various channels with parents, these methods are online as well as offline. In order to preserve a clear overview, first the results of the analysis of all online communication channels will be provided after that of the offline channels.

3.1 Online communication

GGD Groningen distributes its information online through several channels. The website of GGD Groningen is its main platform, however on this website no extensive information about vaccinations is available, and repeatedly links are provided to the websites of the Rijksvaccinatieprogramma (RVP) and the Rijksinstituut Volksgezondheid en Milieu (RIVM). Due to the fact that the RVP is the vaccination programme the GGD executes, under supervision of the RIVM, also these websites have been analysed. The analysis of these websites reflects the communication style of the above-mentioned governmental institutions. Besides the website, GGD Groningen also maintains an account on Twitter and Facebook. The posts of both of these accounts are analysed over a time-stretch of six months; October 18, 2015 until April 18, 2016. This time span is chosen as the GGD is not very active on social media, therefore the period of six months can show the frequency with which the GGD posts vaccination-related messages and whether it might have decreased or increased over time. Every channel is analysed by means of the key-concepts, the graphs display the results per channel of this analysis.

Content on the website of GGD Groningen

The website of the GGD does not only focus on vaccinations, as the GGD maintains the public health in other areas as well. The information the GGD does offer on its website about vaccinations is rather scarce, with three informative pages about vaccinations and one brochure. The results of the analysis can be found in graph 1. And the full analysis of every page can be found in appendix V; *content on the website of GGD Groningen*.



All pages on the website of the GGD have a high perceived credibility, this is thanks to two reasons. Firstly the GGD an institution which is bound to high ethical values, like transparency and honesty. Secondly the GGD is a public health service where the main employees are doctors, whom are perceived as the most credible source, when it comes to health (Kata, 2012). Despite the fact that doctors are perceived as a highly credible source, the majority of people search the internet before

they consult a doctor (University of California, 2012), which makes the website of the GGD an important aspect of its communication.

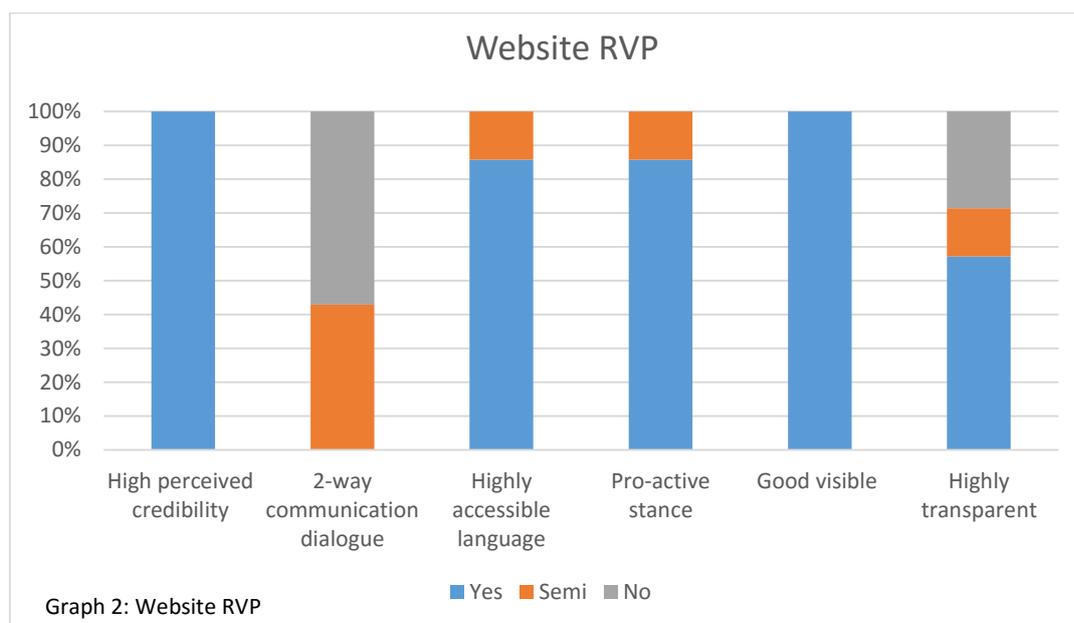
As shown in graph 1, the key-concept: two-way communication dialogue is assessed as semi, which is due to the fact that no two-way communication dialogue takes place at the website, however, it is highly encouraged. The website itself is mainly a medium to inform and the GGD upholds different methods to engage in a two-way communication dialogue. Nonetheless at every page a two-way communication dialogue is highly encouraged, as all the contact information is listed on every page. Therefore the outcome for this website is a 100% semi two-way communication dialogue.

The use of language and pro-activity both are assessed good at all the webpages. The language of the texts is easy to understand as no difficult words are used and everything is explained clearly, which makes it highly accessible. Moreover the GGD takes a pro-active stance as the webpages are regularly updated and parents are informed pro-actively about different matters.

In comparison to the other key-concepts, the concept visibility lacked. Two pages were highly visible as a direct link from the homepage and in the menu, redirected to these pages. The two other pages, of which one covered the frequently asked questions about DKTP-vaccination, and one was a brochure about how to soothe your child, had to be searched for actively. Besides the visibility, the transparency wasn't assessed with a 100% either. Two pages don't provide all information and reading the pages raises questions, instead of solely providing information. An example of the information missing are for instance the risks of DKTP or the advantages/disadvantages of vaccinating.

Content on the website of the Rijksvaccinatieprogramma

The vaccinations which the GGD gives to children are part of a national programme: the Rijksvaccinatieprogramma (RVP), a programme which is arranged and subsidized by the government. The website of the GGD links multiple times to the website of the RVP, since the website of RVP offers extensive information about the national vaccination programme and vaccinations. The analysis of all separate pages of the RVP can be found in appendix VI; *content on the website of the Rijksvaccinatieprogramma*. A summary of this analysis is given in graph 2.



Similarly to the website of the GGD, the website of the RVP has a high credibility rate of 100% and the reason is same, as the RVP is a governmental institution which has to uphold high ethical values and is

closely linked to doctors. At the majority of the pages, no two-way communication dialogue is encouraged as only a few pages offer contact information. The contact information is provided for parents who have additional questions or want to report any side-effects as a consequence of the vaccinations.

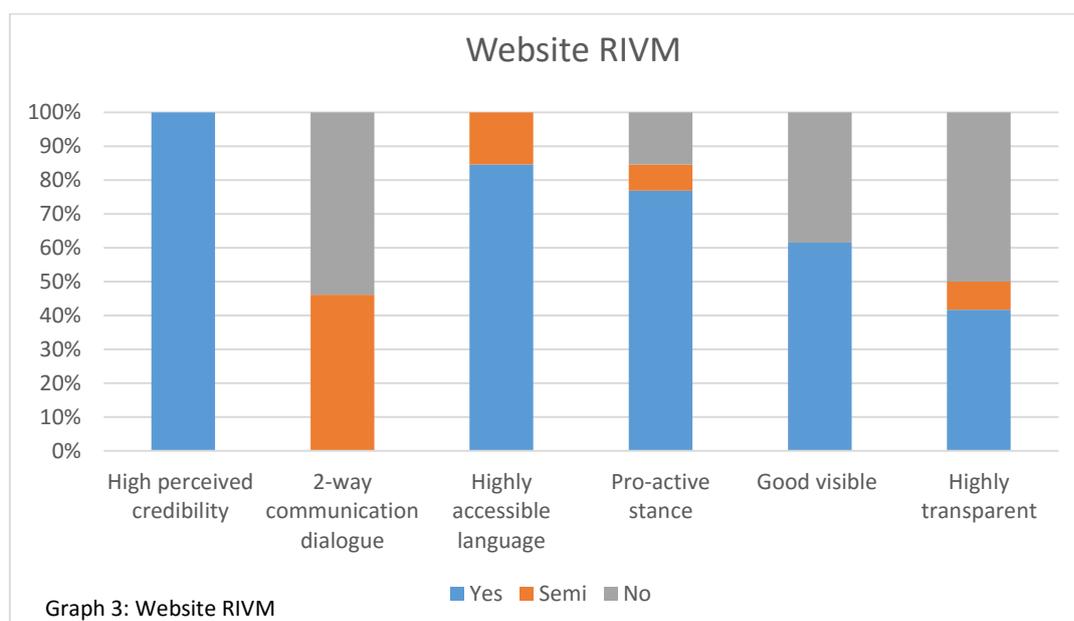
The language used on the website is highly accessible and easy to understand. However vaccinations are a complex topic and due to this complexity some parts are difficult to understand, especially when it comes to the more technical part of vaccinations. The RVP does a good effort to minimize the complexity as much as possible but some parts remain more complex and use more difficult language.

The majority of the website is pro-active, as it is highly informative and clearly up-to-date with all recent developments. This is not only demonstrated by the content of the webpages but also by its news feed. Notably in the light of the objective, is that no information is provided on what to do when you don't vaccinate or the risks of not vaccinating. Many parents who are vaccine-hesitant, are looking for more in-depth information, and as this information is not available on the official website of the RVP, it is likely they will go to other websites which may have provide less credible information.

The information on the website of the RVP is good visible and easy to find. However the rate of transparency lacks on some pages. The majority of the website is perceived as highly transparent, this is because there are links on these pages for more information, references are mentioned and topics are approached from different perspective and full information is given. However some pages raise more questions and seem to be lacking information.

Content on the website of the Rijksinstituut volksgezondheid en milieu

The Rijksinstituut Volksgezondheid en Milieu (RIVM) is responsible for the national vaccination programme (RVP). The RIVM offers a great amount of information about vaccinations on its website, such as the newest researches on vaccinations or information for professionals. Besides that it also created brochures and short informative movies about vaccinations, these are also distributed by the GGD and RVP. The GGD sends the brochures simultaneously with the invitation letters to parents and also offers the brochures in the health centres. As the RIVM stores a lot of information and documents, only the pages directly on the website, the brochures and short movies have been analysed. The analysis of these pages can be found in appendix VII; *content on the website of the RIVM*.



As can be seen in graph 3, the website of the RIVM is 100% credible, this is a result of the fact that the RIVM is a governmental institution which has to uphold high ethical values and consults professionals in the field. Overall the RIVM does not engage in a two-way communication dialogue. In the brochures created by the RIVM a two-way communication dialogue is encouraged, not with the RIVM however, but with the GGD or a family doctor.

A highly accessible language is used on many of the web-pages, as well as the brochures and movies. One of the brochures which provides information about the twelve infection diseases is even available in multiple languages. The information given in the movies is easy to understand and moreover the movies are not too long, therefore it is easy to focus. Most of the information which the RIVM provides is destined for adults, however the RIVM also offers a special section to children. In this section it is explained to children how vaccinations work and why we give them, in a simplified way. A small part of the website of the RIVM does not use highly accessible language, these pages are more complex as they go deeper into the topic of vaccinations.

Overall the RIVM takes a pro-active stance, this is done by answering questions, being up to date with recent developments and updating its current information. Nonetheless this is not the case for all the content on the website as some information seems outdated and can use some updating. Besides that information is missing like where vaccine-hesitant parents can find more information when they doubt.

Generally the information is good visible, especially the brochures, however this is also a result of the distribution of the GGD. The short movies made by the RIVM are not very visible and can only be found under a special heading on the website of the RIVM.

When it comes to transparency, the website of the RIVM is highly transparent. It is possible to gain access in many different documents and even to information available for professionals. That having said the high ratio on non-transparency mainly is observed in the movies and brochures. Where the provided information is very basic and can raise more questions, something which however could be blamed to a lack of space and time.

Content on the Facebook page of GGD Groningen

The Facebook page of GGD Groningen was analysed over a period of six months. As the GGD is also responsible for other matters besides vaccinations, there were multiple posts over the past six months, however only one post was related to vaccinations. This post was an invitation for girls of 13 year old which are eligible for a HPV vaccination. The post clearly states where specific information about this vaccinations can be found, and a link to the website of the GGD is included. As only one post could be analysed, no graphical overview is made but the information can be found in table 2: general information Facebook GGD and table 3: Post Facebook page GGD.

General information	
Likes	387 (at 19/04/2016)
Total amount of posts (period 18/10/2015- 18/4/2016)	63
Posts vaccination related	1

Table 2: General information Facebook GGD

Topic	HPV vaccination
Date	30/03/2016)
Likes	4
Comments	0
High perceived credibility	Yes

2 way communication dialogue	Yes, people can respond to the post and moreover all contact information is provided
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	As the post only has four likes, and the page in general not so much, it is not very likely that this post had a high visibility.
Highly transparent	Yes

Table 3: Post Facebook GGD

Clearly there is space for improvement on the Facebook page of the GGD. Currently it has not many likes nor is it very active. Facebook is a channel where the key-concepts two-way communication dialogue and pro-activity are two assets, therefore there can definitely be gained in the area of social media.

Content on the Twitter page of GGD Groningen

The GGD has been more active on Twitter than Facebook, during the last six months. The Twitter account is analysed in order to get a notion about the activity on the Twitter page and the vaccination related topics the GGD tweets about. Due to the fact that Twitter has a limit on the symbols which can be used, the messages have not been assessed on the key-concepts. The topics of the tweets however can be found in appendix X; *Twitter page of GGD Groningen and JGZ*. Table 4 shows the general information about the Twitter page.

General information	
Followers	159 (at 19/04/2016)
Following	139 (at 19/04/2016)
Total amount of posts (period 18/10/2015- 18/4/2016)	383
Posts vaccination related	14

Table 4: General information Twitter GGD

The main topic of the vaccination related tweets were invitations for upcoming invitation rounds for a specific age. Like HPV for girls who turn thirteen or DKTP/BMR for children of nine. Interesting to note was that on Twitter the GGD did post some messages which contradict the standpoint of the anti-vaccinators, and therefore can be perceived as a response to the anti-vaccinators like:

“Promotion research: Maarten van Wijhe: RVP played a big part in reducing child death.” (GGD, 2016)

“Whooping cough can have terrible consequences.” (GGD, 2016)

Both of these messages contained a link which redirect to an article. Besides these messages there were also messages on the terrible effects of meningitis or the importance of HPV vaccinations.

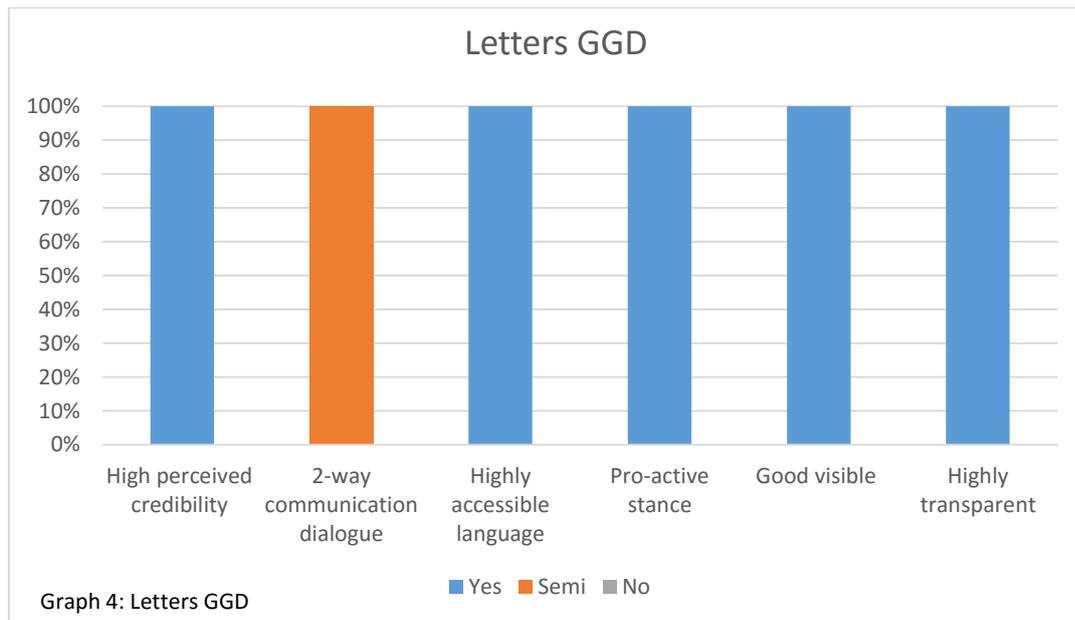
3.2 Offline communication

Nowadays online communication keeps expanding and innovating. Despite this growth traditional communication remains important and can often offer a helping hand in this jungle of messages. A lot of contradicting information can be found online and therefore traditional communication can offer help to confused parents. Offline the GGD mainly communicates by means of letters and meetings with the parents and child. In these meetings vaccinations are not the central topic, but only a small part of the meetings, as the emphasis lays here on the general development of the child.

Letters of the GGD

The letters are sent to the parents when a child is eligible for a vaccination. The letters sent to the parents of a four year old can be found in appendix XVI, and offer a good example of the content of the letters. Some letters also include a brochure about the vaccinations the child will get, these are the brochures which are created by the RIVM. The letters are sent to parents for different purposes:

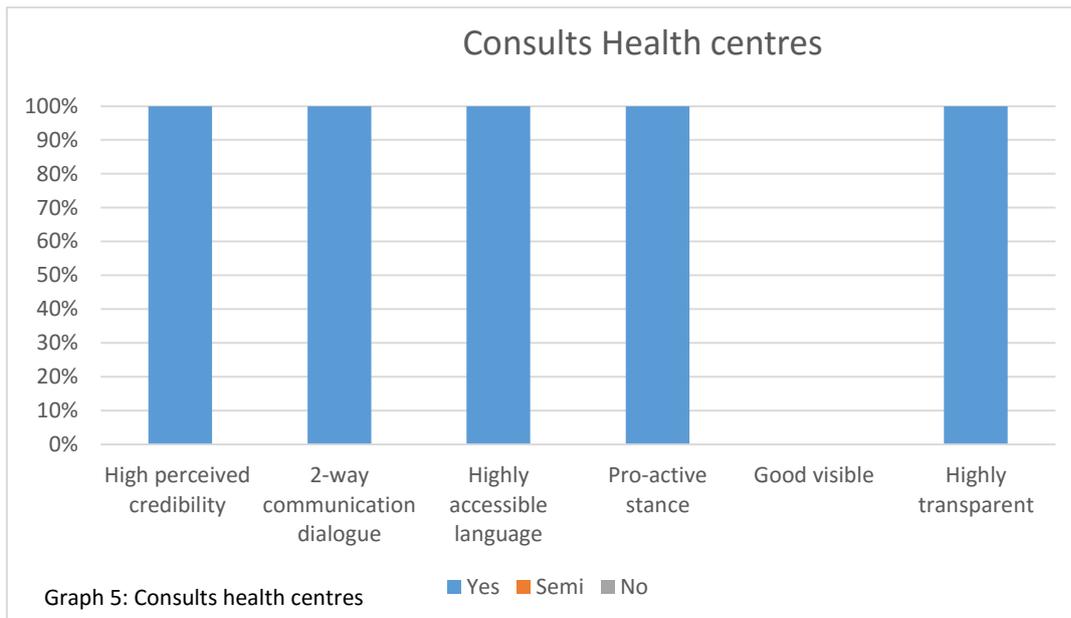
1. A letter for the vaccination certificate (including repetition letters)
2. Invitations for vaccinations
3. Repetition of the invitation
4. Last invitation
5. Invitation for those who indicated they don't want to vaccinate



As can be seen in graph 4 the letters sent by the GGD meet all key-concepts, except for the two-way communication dialogue. However a two-way communication dialogue is highly stimulated as the letters give clear instructions, in case you have more questions. The transparency is high in different ways: the goal is clearly stated but it also tells that vaccinating is not mandatory and every letter is signed.

Parent – doctor consults

The GGD does not only communicate with parents online or through letters, but also face to face. Depending of the age of the child, consults are planned with the doctor, parent and child. Vaccinations are in these meetings only a small part of the entire consult. Doctor Paulien Voskuil offered the chance to attend a day at the health centre in Bedum. The parent-doctor consults were attended at April, 25, 2016 and offered an insight in the course of the consults. It is important to note that because only one doctor was observed in the consults, that this only gives a small example about how a meeting could go. The questionnaire amongst doctors, will provide a further insights in these personal meetings and how doctors deal with the meetings. In graph 5: consults health centres, the alignment between the key-concepts and the consults is shown. A summary of each of the consults can be found in appendix XVII; *notes and analysis consults doctor-parents*.



All key-concepts have been met in the consults, except for “good visible” as this concept is not applicable for the parent-doctor meetings. The meetings have a high perceived credibility as the doctor provides information suiting to ones’ personal situation and on research based evidence. During the meeting an ongoing two-way communication dialogue was observed, where the focus did not only lay on informing only but also on listening and explaining. In consult eight (see appendix XVII) the doctor did not focus as much on the two-way communication dialogue as with the other parents, and spoke more herself. After the consult doctor Voskuil explained that she did this intentionally because the mother was hesitating about vaccinations, but didn’t fully make up her mind and seemed to be insecure on this topic. By providing more information contradicting to the Facebook groups and websites like NVKP, the mother might change her mind and has something new to think about. Besides the two-way communication dialogue which already take place during the meetings, doctor Voskuil also encourages two-way communication dialogues in the future. She did this by constantly reminding the parents to ask for more information by calling to the health centre or making a new appointment.

The language was highly accessible and in case the information became complicated doctor Voskuil elaborated on it, or explained it with a drawing. She didn’t ask a clear confirmation, whether the parents understood her or not. But by asking questions to the parents and offering the parents the time to ask questions, she received the confirmation indirect.

During the meeting the doctor took a pro-active stance, so did she start herself about some counter arguments the parents might have and provided information about new researches. Voskuil showed she was clearly up to date with the newest information in many different areas and provided a lot of information about recent developments. The pro-activity was however not only demonstrated by this but also by saying : *“I would like to speak to you again about this in six months”* (2016), she showed pro-activity. Besides that she also ensures her support to the parents in the future and builds trust.

The doctor was highly transparent as she told exactly her position in specific situations. For instance when a mother said she didn’t want to vaccinate her child Voskuil responded: *“I understand your position, but my position is to inform you more about vaccinations”* (2016). Moreover she told exactly where parents can find more information. Also about procedures she was very open and gave advice on how the parents could handle the consecutive steps that have to be undertaken best.

Besides the key-concepts which were also analysed in the other communication channels, environmental key-concepts were observed during these meetings as well. Prevailing opinion leadership for instance, many parents followed the doctors opinion and therefore the research of the University of California (2012) is confirmed, that the doctor is perceived by many as a prevailing opinion leader. However it is not possible to know what is going on in ones' environment and how this affects them. For instance in consult six (see appendix XVII), a mother was strongly against vaccinating and her opinion was based on websites as NVKP or Vaccinvrij, but also her environment, and she did not attach value to the doctors' expertise on vaccinations as much as other parents.

Recent developments also proved to be a very important factor in the meetings. The doctor was well aware of the recent developments and frequently used them as an example. Especially in the two consults where the mothers were not open to vaccinating, however it did not seem to impress as much as other parents. For instance, when Voskuil started about a recent measles outburst at the Veluwe, one mother considered this as an advantage because it means more people are naturally vaccinated now.

After the consults doctor Voskuil explained that for her the children are her clients and not the parents, this means that she sometimes she has to say something parents won't like, but it is better for the child when she says it. Overall she communicated in a very honest and open way, and even when she and the parent didn't agree with each other, she remained honest and open without becoming judgemental. Besides that doctor Voskuil also explained that she intently repeats herself a lot, which is because research pointed out that parents with young children tend to not hear or forget a lot information.

3. Results communication of anti-vaccinators

During these times, where people acquire information through computer mediated communication, it has become easier for groups like anti-vaccinators to reach people and spread their message. Therefore in this analysis the two biggest and most named websites have been analysed namely: Nederlandse Vereniging Kritisch Prikken (NVKP) and Vaccinvrij. Besides these websites, two highly active Facebook groups: Vaccinatiegekte and Vaccinatietwijfelaars have been analysed. Analysis of these platforms give insight in how they communicate and how possibly the GGD could limit their influence

Both of the websites are fully analysed, and in the appendix the analysis of every page with a short summary can be found. For the two Facebook groups, initially the posts of six months would be analysed (similar to the analysis of the GGD Facebook). However during the analysis it came to the light that the posts of one month only, already provides enough information. This is due to the fact that the pages are highly active –especially in comparison to the Facebook page of the GGD – that enough insight was acquired in the messages sent and that further analysis of the group would only lead to unnecessary work and outdated data.

4.1 Websites

Website Nederlandse Vereniging Kritisch Prikken

The Nederlandse Vereniging Kritisch Prikken (NVKP) or as translated to English; the Dutch Association Critical Vaccinations presents itself in the first place as an objective website. A website where the visitor can find objective information on the topic of vaccinations, and provides information that the

RIVM, RVP nor the GGD provides. Their slogan: “*Vaccinating is a choice. Your choice. Not a Duty. Inform yourself about vaccinating!*” implies that the aforementioned institutions don’t provide all the information about vaccinating, and the NVKP wants to complete this in order for you to make a good informed choice. However when reading through the website it becomes clear that it does not provide objective information but is a channel for people who are against vaccinations. The name: Dutch Association Critical Vaccinations, does not immediately gives this away and especially the beginning of the name; Dutch Association, makes it appear as a credible website, with credible information.

Dutch Association is not only in the name but it is possible to become a member of the association. The costs for this are as following:

Contribution 2016

Members owe the following amounts:

With manual bank transfer: full year €35.50. From July 1 €22.00.

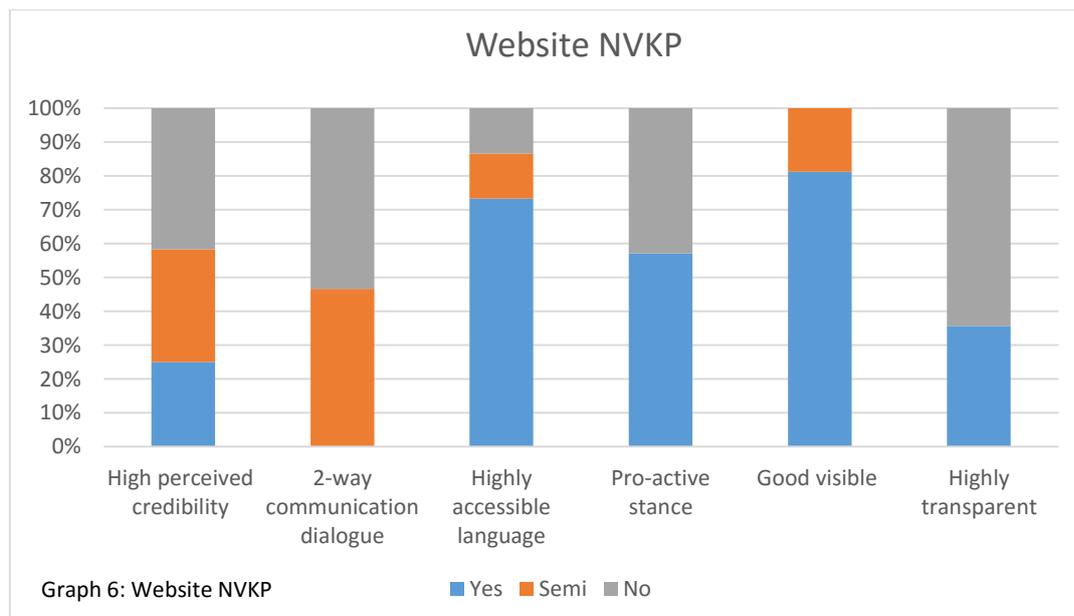
With yearly direct debit: full year €33.00. From July 1 €19.50.

The membership related rights can only be claimed when the full contribution has been paid and only on the name of the member itself.

Source: Website NVKP

Besides becoming a member of the NVKP it is also possible to buy books in the web-shop about vaccinations. The offered books are mainly written by the association, however one book: vaccinations and the immune system, is a book which is not related to the NVKP.

All in all the association informs people through its website, people can become a member and the association sells book. Besides this they also organize symposia about vaccinations, offer a platform to parents who want to share experiences and they offer a map where all the practitioners can be found. There can be said that the association is quite active, the outcomes of the analysis of these pages can be found in graph 6. The full analysis of the website can be found in appendix XI; *content on the website of NVKP*.



The website does not have very high perceived credibility, which is mainly the result of neglecting information and using very strong language. There are three pages which do have a high perceived

credibility namely: newsfeed, personal experiences and disadvantages and advantages of vaccinations. In the newsfeed many articles can be found about vaccinations and many professors are involved hereby increasing the perceived credibility. The high perceived credibility of personal experiences is very close related to transparency, as persons share their story and what they have experienced. However when reading all the personal experiences, the credibility lacks and some texts are clearly translated from English and use a very strong language. Lastly the disadvantages and advantages of vaccinations have a high perceived credibility because the text is written in an objective style and many researches are used. The pages with a semi perceived credibility, look at first sight credible, however when reading critically further, everything becomes more ambiguous. The pages which don't have a high perceived credibility are mainly written in a very strong way with low objectivity and many on-sided information. Many of these pages give little information and only present a small part of the information. An example of this is at one of the pages where the NVKP clearly attempts to decrease the seriousness of polio by stating that *"we remember polio as the disease of full paralysis, however paralysis only appeared in less than 5% of the cases"* (NVKP, 2016). A statement which does not cover the disease at all, as there are different consequences to polio than only full paralysis.

The main goal of the website is to inform, which clarifies the fact that there is no engagement in a two-way communication dialogue. It is possible however to contact the NVKP which is also encouraged on many of its pages, moreover they organize symposia and a parent platform. All these methods don't engage directly in a two-way communication dialogue and therefore there is a semi two-way communication dialogue. This is not the case for all pages, as the majority of the pages don't encourage a two-way communication dialogue.

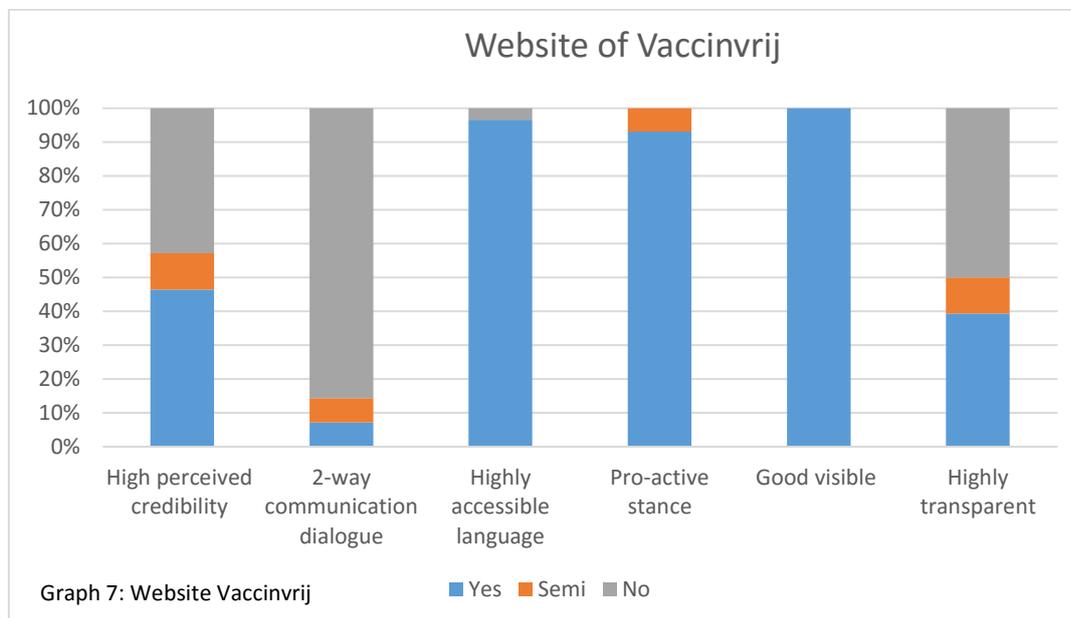
Generally the language use on the website is highly accessible and an easy read. But as aforementioned at some pages the choice of words is rather strong like *"horribly suffering and death"*. The texts with a semi accessible language mainly contain sentences which are written in a strange way or with unnecessary long words. Some of the texts are clearly translated from English which has led to the appearance of some non-existing Dutch words like: *"Boosteren"*. The pages which don't have a highly accessible language mainly have a rather strange use of language but also jargon is used and medication is mentioned, making it difficult to read and understand the text.

The majority of the pages take a pro-active stance by answering many questions directly in-text and informing the parents on many recent developments. Moreover the NVKP lists its contact information at many of the pages and organizes many events which people can attend. This is however not the case for all pages on its website which has resulted in this clear division of pro-active and not pro-active pages.

The overall visibility of the pages is very high, everything is clear and easy to find. The transparency on the website of the NVKP, is divided, however the majority is not transparent. A high transparency is offered for instance about the association where everybody active within the association is listed but also all contact information and the minutes of meetings are posted. Besides that at some page sources are mentioned and multiple views are taken. However the majority of the pages are not transparent which can mainly be blamed to the fact that many information is left out, and when a research is summarised, some arguments which contrast with their standpoint are left out. An example of the missing information is that the research of Wakefield et al., a research which links autism to vaccinations, is represented as valid information despite the fact that this research was retracted in 2010.

Website of Vaccinvrij

The website of Vaccinvrij, translated to English; vaccine free, represents itself, in contrary to the NVKP directly as anti-vaccinator. Its slogan; *“Growing up healthy without vaccines – How and why this is also possible”* written clearly on its homepage, clarifies immediately that this is a website for people who don’t want to vaccinate. The website is built upon the book of Door Frankema; *“Vaccin vrij!”* where parents, doctors and researchers talk about growing up without vaccines. The website Vaccinvrij, can be considered as a tool to support and inform parents who don’t want to vaccinate their child. The website offers extensive information, a parent platform, information for professionals, a blog, the book Vaccin vrij, lists of what to watch and what to read and an agenda with all meetings and lectures related to not vaccinating. In appendix XII, *content on the website Vaccinvrij*, the analysis of all pages and the information the website offers can be reviewed. Besides all this, Vaccinvrij is currently conducting a questionnaire among parents where the main focus is on the differences in health between vaccinated and unvaccinated children. At last it is also possible to sign a public declaration on the website which vouches for a transparent vaccinations policy and to keep the free choice whether to vaccinate or not. Graph 7 shows how the key-concepts are aligned with the website Vaccinvrij.



As can be reviewed in graph 7 there is a strong division between high perceived credibility and not. The credible pages of the website are mostly linked to transparency by for instance, introducing the initiators of the website. Moreover pages with a high perceived credibility are also a result of the fact that Vaccinvrij links its website to professions like doctors, journalists, scientists, judges and lawyers. Besides that Vaccinvrij stimulates parents to trust on their own opinion and conducting their own research by saying: *“You can do your own research and gain information”* (Vaccinvrij, 2016). It increases the credibility as they encourage parents to conduct their own research instead of only telling the parents good from wrong. But as can be seen in graph 7 not the entire website has a high perceived credibility. So are there many pages where little information is given, no sources are mentioned and whenever sources are mentioned a lot are based on sources about the process of vaccinating in the U.S. Due to the difference in the health systems, let alone the fact that vaccinations are mandatory in the U.S. and not in the Netherlands, these sources are not credible.

Overall on the entire website Vaccinvrij, highly accessible language is used. However sometimes very populist and strong words are used. The texts where no highly accessible language is used are generally strong and rather deceiving, wherefore one has to pay a lot of attention in order to

understand the text properly. The example below is an example of deceiving and strong language use on the website.

“Hepatitis-B is mainly a disease amongst prostitutes, drug addicts and alcoholics. Do babies need this vaccine?”

Vaccinvrij 2016

Prostitutes and drug addicts are mentioned, and this argument is given while the hepatitis-B vaccine doesn't have anything to do with this. Besides this sentence, not much more is said on the page, however it makes people wonder, why would I do this? I don't associate my baby with this group. But this is not the reason why the hepatitis-B vaccine became part of the RVP.

The website is very pro-active, it is up-to-date with recent developments and integrates this on its webpages. Besides that it addresses topics and arguments people identify with and hereby Vaccinvrij can reach recognition. An example of this is the following: *“Do you feel isolated because the entire village thinks different about vaccinations than you?”* (Vaccinvrij, 2016). Besides this it stimulates parents to think about matters, by asking questions and go deep into the topic.

The visibility of the pages of Vaccinvrij is very high, everything is easy to find and also on Google the website is very easy found. The transparency of the website however lacks. As aforementioned some pages reach transparency by introducing the initiators of the website and why this website was created. Also giving the option to sign the public declaration for a transparent vaccination policy and keeping the choice of vaccinations adds to the transparency. But there are also many of pages where the transparency lacks, as many information is left out and incomplete arguments on many pages. Neither is it clear where Vaccinvrij retrieves its information from as often no sources are referenced.

4.2 Facebook groups

Facebook group Vaccinatiegekte

There are two large Facebook groups, where the theme is vaccinations. One of these groups is: Vaccinatiegekte, translated: Vaccination madness. To be able to see the posts, and engage in the group discussions, one should apply for membership which has to be approved by the group owner. Due to the high activity in the Facebook groups about vaccinations, the group has been analysed for a period of one month. The analysis of all the posts during this month can be reviewed in appendix XIV; Facebook page of Vaccinatiegekte. An overview of how the page meets the key-concepts can be found in graph 8, but first some general information is offered below, in table 5.

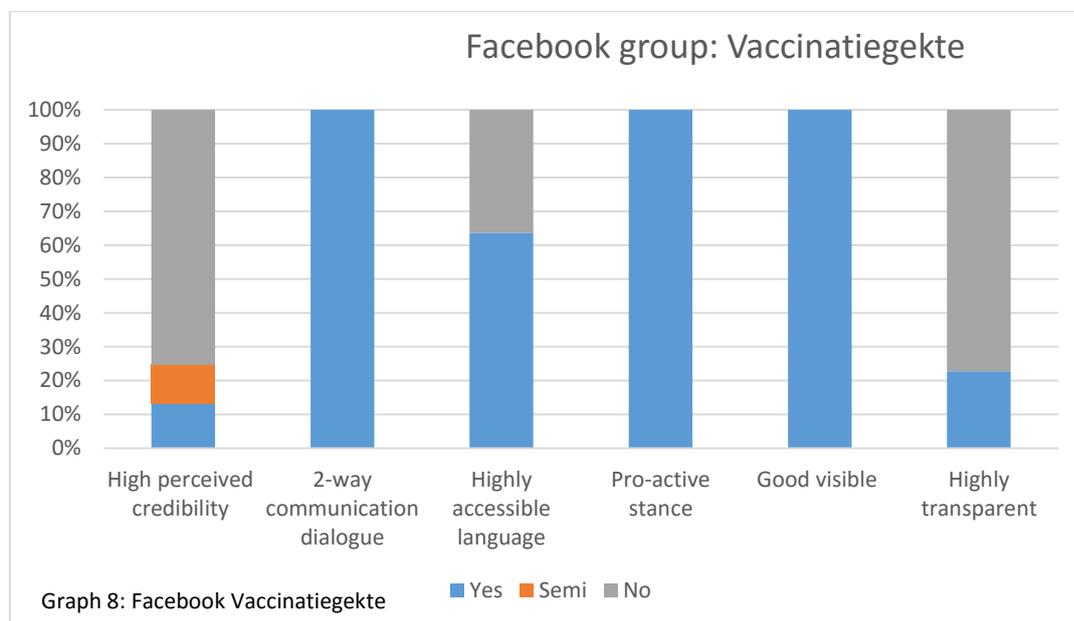
Members	16041
Description of the page	Welcome to this group, if you have any questions please ask them, there are some people here who definitely know the answer. In the files you will find a lot of information and on the timeline even more. If you want to post something, please stick to vaccinations and relevant medical cases, in order to keep a clear overview for people who want to inform themselves. Enjoy ☀ Here a link where you can announce vaccination harm or side effects in the Netherlands: https://www.lareb.nl/Meld-bijwerking/Meldformulier.aspx
Total amount of posts (period 18/03/2016- 18/4/2016)	96
Relevant posts	66, with likes:201 Reactions: 60

Table 5: General information Facebook group Vaccinatiegekte

The general information given in table 5, shows that the total amount of posts was 96, however only 66 posts are analysed as only these were relevant in the light of the research perspective. The thirty posts which are dismissed, was spam linking to websites and articles unrelated to the topic, posted by people who get money for the amount of clicks on their website. The 66 posts which are analysed, mainly linked to an article/website, with information about vaccinations. Notable was that despite the fact that the description clearly states you can ask any questions you want, only three questions were asked in this group. Two possible reasons for this have been observed, first of all many members of Vaccinatiegekte gave the impression to be strongly against vaccinations, and therefore parents with questions might not directly ask them here. Additional to this, the answers given to the questions, were quite unsupportive, and members mainly used it as an opportunity to resonate their thoughts about vaccinations (vaccinations are bad) without argumentation.

Because many members of the group gave the impression to be strongly against vaccinations, little space was left for vaccine-hesitant parents. There were quite some recurring topics in the Facebook groups, which could be considered as popular topics amongst anti-vaccinators. The topics are the following:

- Posts against pharmaceutical companies, mainly themed on how much money they make, how corrupt they are, and how bad they are.
- The bad components of vaccinations
- The consequences of vaccinations: autism, asthma, ADHD etc.
- The movie Vaxxed
- People suing the pharmaceutical companies
- Medical world insiders, telling their stories
- Conspiracy theories



As graph 8 shows, the key-concepts two-way communication dialogue, a pro-active stance and visibility are all met in the Facebook group with a 100%. This is mainly because these key-concepts are main assets offered by Facebook. Everybody is able to respond to one other and engage in a two-way communication dialogue. Moreover by posting in the group one takes a pro-active stance and the messages are good visible, especially when the notifications for the group are turned on. Therefore these three key-concepts all have been met in the Facebook group.

Only a small amount of the posts reached a high or semi perceived credibility, these posts were considered as (semi) credible because they linked to credible websites, such as recognized news sites. The majority of the posts however, did not reach a high perceived credibility, which can be blamed to the low credibility of the websites and articles to which the members linked their posts. Moreover many posts were linked to foreign articles, these articles however where not relevant for the situation in the Netherlands, but were presented as such.

Graph 8 shows that a small majority of the posts is written in a highly accessible language. These messages are easy to read, as it is written by non-professionals and no jargon is used. The posts which don't use a highly accessible language mainly posted in another language or linked to a website in a foreign language. Some of the posts are written in Dutch, but clearly translated by a translation machine, which makes the text very difficult to understand. That having said, not everybody translates its texts but just posts it in in English or German, languages which might be difficult for other members of the group. One interesting fact about the different languages is that one woman who is very active in both Facebook groups, Vaccinatiegekte and Vaccinatietwijfelaars, posts in the former only in German and in the latter only in Dutch, despite the fact that both Facebook groups are Dutch.

The transparency of the posts lacks, information is left out, no arguments are provided and the links in the posts don't redirect to transparent websites. The posts which maintain a high transparency level mainly link to well-known news websites or institutions.

Facebook of Vaccinatietwijfelaars

Besides the Facebook group vaccination madness, the Facebook Vaccinatietwijfelaars (Vaccination doubters) is also a highly active group where vaccinations are discussed intensely. In contrary to the vaccination madness, where most members are strongly against vaccinations, the members of this group are more divided by their opinions. Without a doubt, the anti-vaccinators still have the loudest voice in this group, but there are clearly more vaccine-hesitant parents and strong pro-vaccinators, which makes the discussion more varied. Overall the active members of Vaccinatietwijfelaars take a well-argued standpoint and really try to help each other. The analysis of the posts over a month can be found in appendix XV; *Facebook page of Vaccinatietwijfelaars*. Table 6 and graph 9 provide a summary of all findings and the analysis of the group.

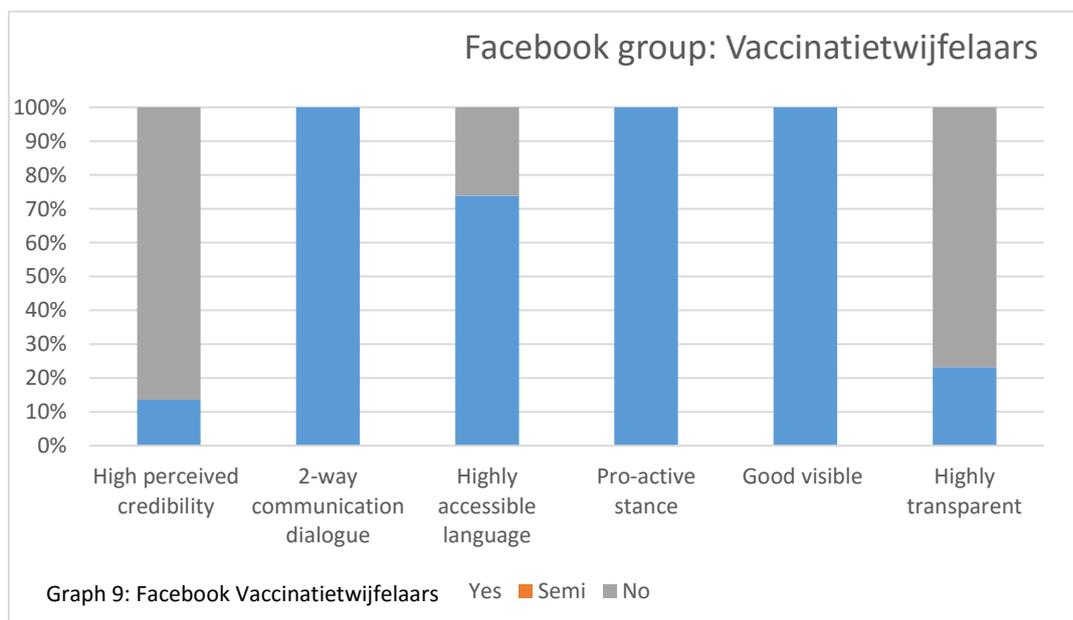
General information	
Members	1440
General description page (shortened)	This page was initially a page where doubters about vaccinations could discuss with peers what they were doing and how they felt. However it changed into a discussion page for the anti and the pro vaccinators. As an owner I will be ok with this, and the anti and pro vaccinators will stay welcome, without keeping into account the real doubter, as I've created a new secret group for this. I do have one demand and that is that this page will continue going about vaccinations. However I don't want any personal problems to be fought out here, as we all have feelings and as an owner I don't want to be a facilitator for fights and pain through this page.
Total amount of posts (period 18/03/2016- 18/4/2016)	91
Relevant posts	69 , with likes: 185 Reactions: 598

Table 6: General information Facebook group Vaccinatietwijfelaars

On this page from the 91 posts only 69 were relevant, due to the fact that also in Vaccinatietwijfelaars people spammed the page with websites who earn money with the amount of clicks they get. The attitude in this Facebook group is different from Vaccinatiegekte. First of all, as aforementioned, there is a division between anti-vaccinators, pro-vaccinators and vaccine-hesitant people instead of merely anti-vaccinators. The topics of the posts in the group also differs from those in Vaccinatiegekte, and moreover in Vaccinatietwijfelaars many people asked questions. From the 69 posts in a month, 28 posts were questions asked, in contrary to the 3 questions asked in Vaccinatiegekte. The answers to the questions were also more helpful. Only at a few questions people started a nasty discussion aiming to get their opinion through. This was often when parents asked more general questions about the matter of vaccinations as: *“Should I vaccinate or not?”* (Vaccinatietwijfelaars, 2016)

Members of the group Vaccinatietwijfelaars are also more critical on the articles and websites which were posted than the members of Vaccinatiegekte. In the latter members often agreed with an article or post, without checking its credibility or checking whether the information was complete. In this Facebook group, people approached the articles and websites with a more critical eye. People asked for a source, doubted the sources, said the article was incomplete and not the whole research was taken into account in it or they simply just said: *“Don’t believe everything on the internet”* (Vaccinatietwijfelaars, 2016).

Despite the fact that Vaccinatietwijfelaars can be considered as friendlier than the group Vaccinatiegekte, some people thought of Vaccinatietwijfelaars as a too strong group. A woman announced on April, 5, 2016 that she doesn’t want to be a member anymore of the group, as the division between yes and no is too big, leaving no space for vaccine-hesitant parents. Many of the members agreed with her and also added that the use of language in the group is sometimes too aggressive and that even though there are also vaccine-hesitant parents and pro-vaccinators, it is not well balanced as too much input in this group comes from the anti-vaccinators.



In this graph a 100% score of two-way communication dialogue, pro-active stance and good visibility can be observed. The argumentation for this is the same as for the Facebook group Vaccinatiegekte. These three key-concepts are important assets of Facebook. When someone posts a two-way communication dialogue is always possible as people can respond to each other, which often happens.

It is pro-active as someone has to take a pro-active stance to post something instead of re-active and all messages are good visible especially when someone has turned their notifications on.

The credibility of the messages as can be seen in graph 9, is rather low. One of the reasons for this is that credibility is not used for the questions asked in the group. The posts which had a high perceived credibility mainly linked to transparent websites like one post linked to the Radar, the majority of the pages linked however to websites with low credibility.

The majority of the language is highly accessible on this Facebook group as people use day-to-day language. In contrary to the Facebook group: Vaccinatiegekte, many of the posts are in Dutch or link to Dutch websites. Only a rough 20% of the links to websites, link to foreign languages.

The transparency is low for Vaccinatietwijfelaars, this is firstly because posts are linked to sketchy websites where a lot of information seems incomplete. Moreover many people don't use sources when they answer each other or are discussing. This makes sense, as it might be strange to reference everything you say in a discussion, however it results in a situation where no one knows where they got their information from and whether it is true, but still making assumptions on the information presented.

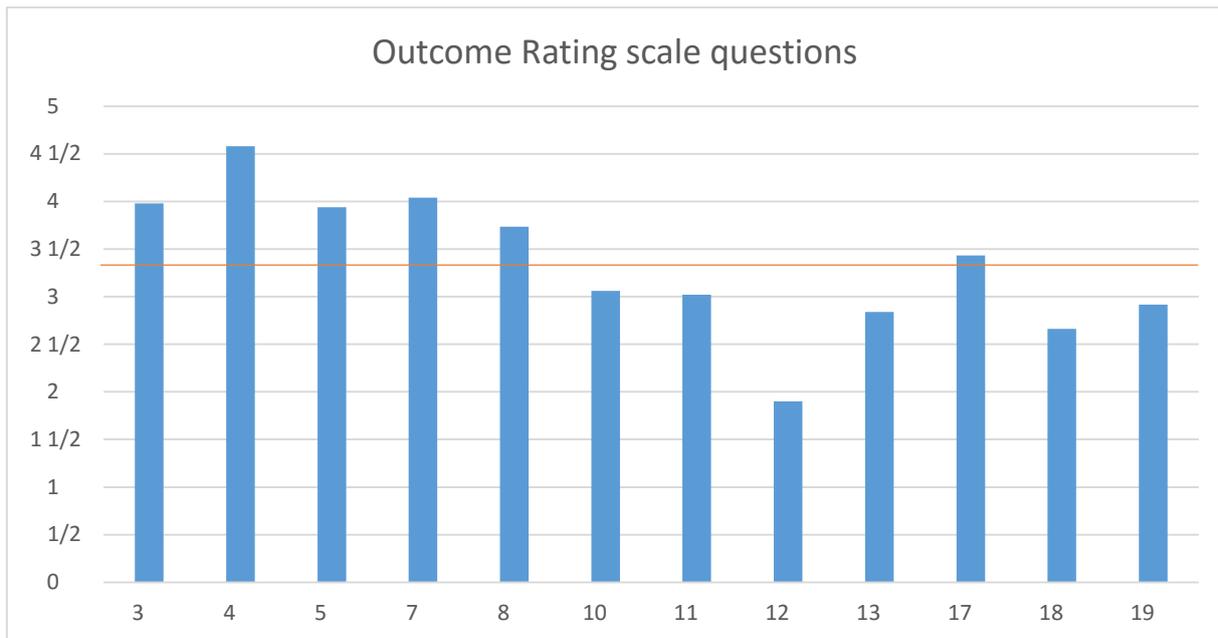
4. Results of questionnaires

A questionnaire is conducted amongst the parents and the GGD doctors. In this chapter the results of these questionnaires are discussed.

5.1 Questionnaire of parents

The questionnaire for the parents is designed in order to understand the parents' opinion and experience with the communication of the GGD and their experience with anti-vaccination movements. The questionnaire acquires information related to many different aspects, so are questions connected to the key-concepts but some questions also focus on gaining additional information; like how parents get in touch with anti-vaccinators. The questionnaire is distributed to the parents through the health centres, where the progress and health of the children is assessed and moreover children also receive their vaccinations at the health centre. The questionnaire consists of rating scale questions, multiple choice questions and two open questions, or space to give additional information. This chapter summarizes the results and the analysis of the results, the full questionnaire can be found in appendix I; *questionnaire parents* and in order to see the full statistical outcomes of the questionnaire consult appendix III; *outcomes questionnaire parents*. The questionnaire is filled out by 50 parents. As no correlation was found between the age/gender of the parents and the results, these questions have not been taken into account, possibly with more respondents a relationship might be observed.

Graph 10 on the following page, shows the outcome on the rating scale questions of the questionnaire conducted amongst the parents. Parents were able to rate on the scale from 1-5, where 1 is rarely and 5 is always. The orange line in the graph shows the average rating of the parents in the questionnaire. The questions of which graph 10 shows the results can be reviewed in table 6.



Graph 10: Rating scale questions Parents

Number	Question
3	Is for you the opinion of a doctor important?
4	Do you understand everything the GGD doctor tells you?
5	When you speak to a GGD doctor, is this a dialogue?
7	Do you think the information provided by the GGD on vaccinations is clear?
8	Does the GGD in your opinion, distributes complete information about vaccinations?
10	Are vaccinations a topic which is frequently discussed about in your environment? (Family, friends, neighbours)?
11	Is for you the opinion of your close environment important?
12	Are you influenced by your environment concerning vaccinations?
13	Do news stories about vaccinations influence you?
17	Are the arguments against vaccinations clear for you?
18	Do you agree with the arguments against vaccinations?
19	Do you consider persons/groups who are against vaccination, as up-to-date with recent developments and scientific researches?

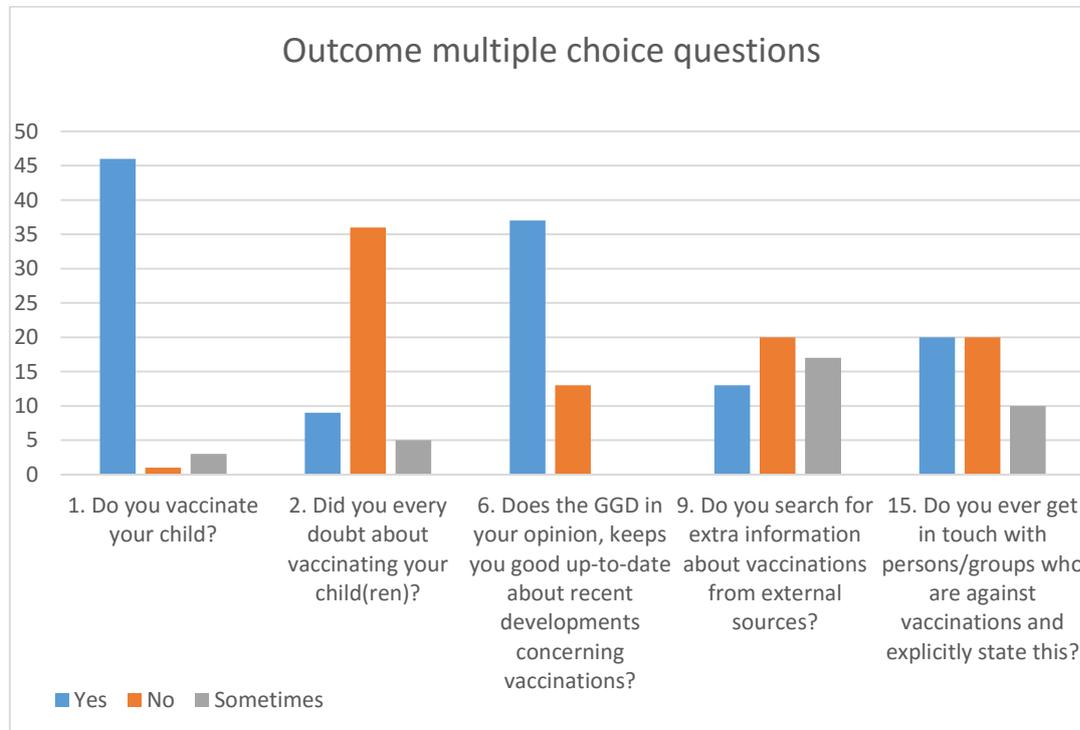
Table 6: Rating questions questionnaire parents

The overall communication of the GGD is assessed well, with a score above average on the questions 3-8, which focus on the communication of the GGD. From these questions the highest score is reached on whether the parents understand the doctor (accessible language), with a rating over 4.5. Besides the good ratings, nowhere a full score (always) is reached. Graph 10 shows that the value parents attach to the opinion of its environment concerning vaccinations is considerably smaller than the value they attach to a doctors' opinion, meaning that doctors are an important opinion leader.

Parents rated the arguments given by anti-vaccination movements as clear, with a score just above average. On the question whether the parents agree with anti-vaccination movements and whether they considered them as up-to-date with recent developments, the answers of parents tend more towards rarely rather than always.

Besides the rating scale questions, multiple choice questions were also part of the questionnaire. The outcome of the multiple choice questions can be reviewed in graph 11. The answers to these questions

were yes, no and sometimes, with exception of question 16. In question 16 parents were asked that if they got in touch with anti-vaccinators, how they got in touch. The options for this question was: social media, websites, personal environment and through their child. These options are based on the initial knowledge of the GGD and additional research. The results for how parents got in touch with anti-vaccinators can be seen in graph 12.

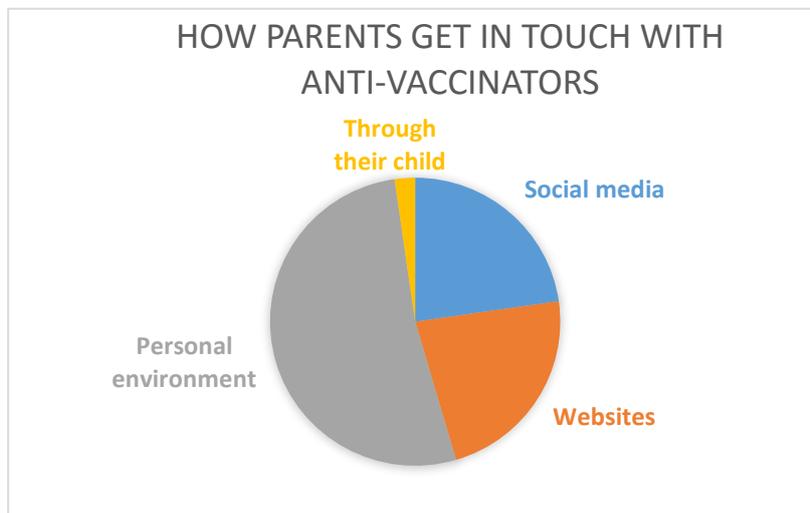


Graph 11: Multiple choice questions parents

A vast majority of the parents vaccinate their child, with only one parent who doesn't and three sometimes (sometimes can be read here as that parents follow an alternative vaccination schedule). From the group of parents questioned, the minority of the group (14), doubt about vaccinations or sometimes doubt about vaccinations. At first sight these 14 could be seen as a small part, however all these parents can be considered as vaccine-hesitant parents, making the group of vaccine-hesitant parents larger than initially could be thought when considering the high vaccination rate of the group. When talking about the communication of the GGD, the majority of the parents is of opinion that the GGD keeps them good updated about recent developments concerning vaccinations. Besides this positive outcome, it is important to remember that the parents who don't think the GGD keeps them good updated is more interesting. It is interesting to know what they exactly would like the GGD to do, a question which will be answered by the open questions. After question one, two and six the answers are clearly more balanced.

This is the case for question nine, where 20 of the parents don't look for extra information about vaccinations but 17 parents do this sometimes and 13 do this. This question also offered an open space to parents, where they could fill in why they searched for extra information and where they looked for this extra information. Most of the parents did this because they wanted to get more information, as the information they received from the GGD was considered as basic and they also want to know more about the advantages and disadvantages. Besides this they also search for extra information to learn more about the side-effects and experiences of other parents. Most of the parents searched with Google however some parents also mentioned NVKP, Vaccinvrij or they spoke about vaccinations with other mothers.

Twenty of the parents didn't get in touch with persons or groups which explicitly argue against vaccinations. Twenty parents did get in touch and 10 parents sometimes. This group also answered question 16 for which the answers can be found in graph 12.



As graph 12 shows, parents mainly got in touch with anti-vaccinators through their personal environment. After that through social media and websites. This can be linked to question 9, where many parents filled in that they looked for more information through Google. Generally when you Google about vaccinations the first hits are of anti-vaccination movements.

Graph 12: Contact with anti-vaccinators

Almost the entire questionnaire consists out of closed questions, which are portrayed in the graphs. Two questions (14 and 20) are open questions which are optional to answer. In this part the answers to these questions are summarized, the majority of the parents didn't answer to these questions.

"14. Do you miss anything in the communication of the GGD? Yes namely... "

Despite the fact that multiple parents answered this question, a review of their answers leads to two main answers. First of all the parents would like to receive more information about the advantages and disadvantages of vaccinations, as according to the parents, currently the GGD primarily gives one-sided information. Moreover parents would like to see more information about recent developments and innovation. One parent answered to this question that she would like to see more information about an alternative vaccination schedule at the first consult.

"20. Would you like to add anything to this questionnaire?"

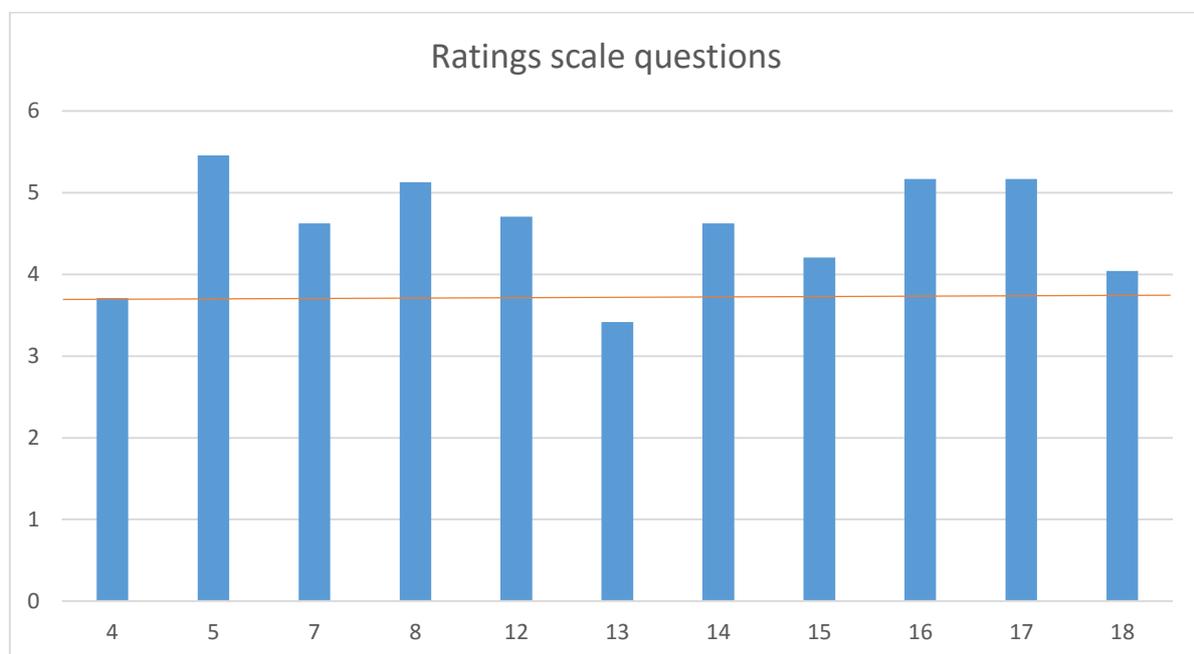
The answers to question 20 are rather similar to these of question 14. As parents like the GGD to speak more about the reasons to vaccinate, and argue from different sides instead of providing only information which only works towards people vaccinating their children. Parents said that neither the GGD nor the anti-vaccination movements offer two-sided objective information. Besides that more response to the circulating stories is asked by the parents.

5.2 Questionnaire of doctors

The questionnaire for doctors is created for different reasons than the questionnaire of the parents. Firstly it is designed to understand how the doctors perceive their contact with the parents and how they perceive their role towards the parents, the perception and role they take, could be important components for the advice. Secondly as the doctors are frequently in touch with parents, they know a lot about the perceptions and concerns of parents, and might add additional information on this. The questionnaire was created online and distributed through the E-mail address of doctor Paulien Voskuil. Two E-mails are sent out, one with the questionnaire and a question to fill this in, and a reminder to

fill out the questionnaire. Twenty-eight questionnaires were primarily filled out, however four of these questionnaires were unfinished wherefore these were discarded, and the twenty-four remaining questionnaires are included in the results. The fact that twenty-four questionnaires are filled out means that approximately 48% of the doctors responded to the questionnaire. The age and gender of the doctors was asked in order to learn whether there is a relation between answers and one of these variables, however the genders were not balanced as only 10.71% of the respondents were male. Which makes it hard to assess whether there is a relation or not, moreover a relationship with the age couldn't be observed either, as some doctors didn't fill this in according to the truth as 90 and 99 were filled in as ages. Therefore these variables are not taken into account for the results.

This chapter summarizes the results of the questionnaire, for more extensive outcomes please consult appendix IV; *outcome questionnaire doctors* and for the full questionnaire given to the doctors consults appendix II; *questionnaire doctors*. The questionnaire consisted out of rating scale questions and multiple choice questions. The outcomes of the rating scale questions can be found in graph 13 and the accompanying questions in table 7. Doctors could rate their answers on the scale from 1-6 where 1 is rarely and 6 always.



Graph 13: Rating scale questions doctors

Number	Question
4	I understand parents who don't want to vaccinate, or when they prefer an alternative vaccination schedule.
5	When I speak with parents about an alternative vaccination schedule, this is a calm conversation.
7	I'm curious about the perspective of parents towards vaccinations.
8	When I'm aware of the perspective of the parents on vaccinations, I always tell about my perspective.
12	I ensure myself that parents understand me. I do this by asking this and/or asking questions.
13	Parents seem to be good informed in advance about vaccinations, this shows in our meetings.
14	I notice parents are influenced by their environment when it comes to vaccinations.

15	I notice that after events linked to vaccinations, parents are more concerned. Example: The baby of Groningen of 3 weeks who passed away of whooping cough.
16	I'm aware that I can be a contributing factor for parents to vaccinate or not.
17	I'm aware of the recent developments concerning vaccinations.
18	The information which the GGD provides to parents (Brochures, letter, websites etc.) is complete and doesn't need changes.

Table 7: Rating questions questionnaire doctors

The rating scale questions 5-12 are related to the key-concepts two-way communication dialogue, use of accessible language and takes a pro-active stance. The rating on these question is high and above the average rating, indicating that these key-concepts are important to doctors and are applied by the doctors. The understanding of doctors however, towards parents who don't want to vaccinate or follow an alternative vaccination schedule is lower. Moreover doctors don't have the impression that parents are well informed prior to their consult, this can be linked to the results of the questionnaire amongst parents, as many parents don't doubt about vaccinations and don't look for extra information. The parents who do look for more information are often the more critical parents who are vaccine-hesitant or don't want to vaccinate. The doctors are well aware of their role towards parents and the fact that they can be a contributing factor to parents whether they vaccinate their child or not. They also indicated that they are well aware of the recent developments concerning vaccinations. Many of the doctors also noticed that parents are influenced by their environment and recent developments. Something which can be –as shown in the research perspective – positive as well as negative. The doctors don't consider the information provided by the GGD as complete, as it might be too basic for many parents.

As well as the questionnaire amongst parents, multiple choice questions are also included in this questionnaire. Because the answers to the questions are all different and not similar as with the questionnaire for the parents, the graphs for these multiple choice questions can be found in appendix IV *outcome questionnaire doctors*. A short summary about the results acquired through the multiple choice questions will be described here.

With 75%, the majority of the doctors execute the conversations about vaccinations, 21% does this as much as possible and 4% doesn't execute these conversations. By executing the conversations their selves, the doctors fulfil their role as opinion leader to the parents. It is not clear why the 4% doesn't do these conversations their selves. The majority of the doctors 71.9% takes the time to talk with parents about vaccinations, but they also indicated it is hard to find the time to discuss the vaccinations. When the doctors talk to parents about the vaccinations, the side-effects are always told by 91.8% of the doctors, 8.2% only does this when the parents ask about it.

Besides this with a vast majority of 95.8% the doctors consider the contact with parents as a positive investment in their relationship. The remaining 4.2% considers the contact sometimes as a positive investment in the relationship. At the question: parents understand my use of language, 45.8% agreed yes, 50% think that the parents understand them and 4.2% doesn't know.

5. Discussion of results

This research extensively focused on the different communication channels used by the GGD and anti-vaccinators, but also on the parents' perspective in this. This research is executed for the GGD Groningen and municipality of Groningen, however in the analysis of the communication means also national sources have been taken into account. This was as the website of GGD Groningen frequently links to the RIVM and RVP and because no local anti-vaccination movements were found. The majority of the people indicated they got in touch with anti-vaccinators through their personal environment. Therefore, for further research it might be interesting to know what exactly happens in their personal environment and in what way they communicate about vaccinations with their environment.

Despite the fact that the questionnaire amongst the parents and doctors provided fruitful insights, they could have provided more extensive and reliable information. However due to the time-constraints and the reachability of these groups, the sample groups were smaller than they could have been. Especially the questionnaire among the doctors could become more credible, when all doctors respond to it. This is because doctors who feel more involved with this topic, are more likely to fill this questionnaire in, than doctors who feel less connected to this topic.

The results however are very interesting and has led to four recommendations on which will be further elaborated in the conclusion. It is important to note, that even though the recommendations are based on research and are highly recommended to the GGD. Every new implementation on communication connected to the topic might also be counterproductive, as it draws more attention to the topic of vaccinations and might be framed as a "defence" of the GGD by the anti-vaccinators. Therefore the recommendations ought to be implemented with caution and transparency.

6. Conclusion and recommendations

Right from the start of this research it was clear that child vaccinations is a sensitive topic with multiple parties involved and many different opinions. Therefore a thorough analysis of many different communication channels of anti-vaccinators and the GGD was executed, in order to understand what influences vaccine-hesitant parents. Additional to the analysis of the communication channels, questionnaires amongst parents and doctors were conducted to learn from their perceptions and simultaneously completing the results.

In order to analyse the communications, key-concepts were applied from the following categories: communicator, communication means and environmental. By operationalizing the key-concepts, every channel was analysed and assessed by the same standard. The key-concepts are based on the literature study and are considered as important aspects for the communication on vaccinations. None of the categories of key-concepts is considered to have a prevailing role in the communications of the GGD or anti-vaccinators. Furthermore, the questionnaire amongst the doctors showed, that for them the key-concepts in the categories communicator and communication means are important. Besides that many doctors noticed that the environmental key-concepts are an important factor for parents. Recent developments and opinion leadership but additional to this also their personal environment is of big influence on parents' opinion about vaccinations.

The communication of the GGD was assessed well on its alignment with the key-concepts. This can be explained by the fact that the GGD uses many different channels for communication, therefore when a key-concept like visibility lacked, this was compensated by another channel. Even though the communication through the different channels together meet the key-concepts, it also important to consider the channels separately as many people first check online before consulting a doctor (University of California, 2012). When zooming in on the online channels, specifically the websites of

the GGD, RVP and RIVM, it was noted that the transparency lacked. Important information was missing or only a short piece was dedicated to a topic, without further elaboration. This was not only found through the analysis but also pointed out by the parents and doctors. The majority of the parents declared they searched their selves for more information about vaccinations online, and also doctors indicated that the current information provided by the GGD is not extensive enough for critical parents. Frequently reasons named by the parents why they looked for more information were: they want to know more about the advantages and disadvantages, as according to the parents, the GGD mainly provides one-sided information. Moreover parents want to know more about the side-effects of vaccinations. Besides that they were also missing a response of the GGD to circulating stories and would like more information of the GGD about recent developments and innovation.

The communication of the anti-vaccination movements did not meet all key-concepts. For every analysed channel the transparency and credibility lacked, something which was however regularly a point of discussion in the Facebook group Vaccinatiewijfelaars. On both of the websites no two-way communication dialogue was possible and barely encouraged. Also in both of the Facebook groups jointly the accessibility of language was poor, which can be blamed to the fact that messages were posted in another language than Dutch or were badly translated to Dutch. Sixty percent of the parents got in touch with persons/groups which are against vaccinations and explicitly stated this. This was mainly through their personal environment and secondly through social media and websites. This can be related to the fact that many parents look for additional information about vaccinations, and channels anti-vaccination movements are prominently visible when using google. Parents assessed the arguments of anti-vaccination movements with above average on the question whether they are clear. On the question if they could say on a scale of 1-5 whether they agreed with the arguments the score was below average.

Altogether the parents miss a place where they can find objective two-sided information about vaccinations. For many of the parents the GGD presents too much one-sided information which is also the case for anti-vaccination movements. Besides that the information of the anti-vaccination movements lacked on many different key-concepts. The personal consults between parent and doctor were assessed highly on all key-concepts and by means of the questionnaire it is found that many doctors consider the key-concept as important. However many doctors indicated that during the consults, vaccinations are not the only topic which has to be discussed and that they don't always have time to go deep into vaccinations. Therefore the following recommendations are made to the GGD, which will be further elaborated on in the following chapter: advice.

Recommendations

1. The GGD is recommended to offer a place to vaccine-hesitant parents where they can find more objective unbiased information about vaccinations from multiple perspectives.
2. The GGD is recommended to address the misconceptions about vaccinations and the statements made by the anti-vaccination movements and explain the story behind this misconception.
3. The GGD is recommended to provide a check-list to parents, on how they can assess the credibility of a source.
4. The GGD is recommended to introduce monthly meetings where the topic vaccinations will be discussed into deep with parents and where parents can ask questions and share their concerns.

7. Advice

Finally the last step of the research framework is achieved, to provide recommendations to the GGD on how they can help vaccine-hesitant parents gain confidence in vaccinations and make a better informed choice. The recommendations are based on the results of the research and are considered as tools which offer a helping hand to vaccine-hesitant parents. In this part of the research every recommendation will be described.

7.1 A place for vaccine-hesitant parents

The GGD is recommended to offer a place to vaccine-hesitant parents where they can find more objective unbiased information about vaccinations from multiple perspectives.

Why?

Many parents indicated that there is a lack of objective unbiased information, as according to the parents, information which is provided about vaccination seems to steer towards one direction. Where the anti-vaccination movements provides too much one-sided information towards the disliking of vaccinations, the GGD provides too much one sided information towards vaccinating your children. This is also confirmed through the analysis of the online communication channels, where the transparency, specifically for the online communication channels, was assessed low. The transparency of the online communication of the GGD mainly lacks because, the provided information raises more questions and information seems to be basic and one-sided. Parents mentioned this also as one of the main reasons for looking for more information about vaccinations online, where it is likely they find a website of an anti-vaccination movement. The transparency of the anti-vaccination movements however isn't sufficient either, as it doesn't provide objective information, many facts are left out and the argumentation is incomplete.

As there is currently no place where (vaccine-hesitant) parents can find information which is objective and meets their needs. It is recommended to the GGD to offer them this place, where information is good visible and presented together. A place where vaccine-hesitant parents can find more information about vaccinations which satisfies their needs and prevents them from drifting off, drawing their own conclusions from websites like the NVKP and Vaccinvrij. When the GGD provides more objective unbiased information, from multiple perspectives, at least the GGD can control the information provided to the parents and ensure that the information is correct and based on scientific research. Besides this it is also important to realize that the GGD is missing some information in their favour which can stimulate vaccine-hesitant parents to rethink their standpoint.

How to do it

The current information which the GGD provides should be updated and go more into deep. The information provided has to be more objective and have a less biased tone. Becoming less biased can already be reached by providing more information. It is important to realize that in case there is a negative aspect to a specific vaccination, this can also be included in the communication of the GGD. Like for instance; the side-effects which can be reviewed on the website of the RIVM, the side-effects are a negative aspect of vaccinations, however that doesn't mean that it shouldn't be included to the information. Besides that there should be elaborated further or added more information about some very specific topics, which could work towards stimulating more vaccine-hesitant parents to vaccinate their children. Firstly the information which should be included will be described and after that how this specific information can be presented and distributed. Recommendation two and three, which will

be explained in the following parts of the advice, can also be integrated in this recommendation. But as recommendation two and three can be exploited individually and in order to emphasize the importance of these recommendations, they are not directly integrated into recommendation one.

What information?

- More in-depth information about the vaccinations itself. At this moment there is information available about the vaccinations however the information is basic, or a parent has to consult the more complicated information leaflets of the vaccinations. Different aspects of vaccinations should be elaborated on. First of all, how the vaccinations work, not all parents might be aware of this. When they understand the process of vaccinating parents can also see why being immunized naturally is not necessarily better. Besides this there should be focused on the safety and the components of vaccinations. Many rumours go around about the safety and components, but when the GGD elaborates more on this with scientific research, parents might feel more reassured.
- More information about the diseases. As the European centre for disease prevention and control mentioned in its report (2012): *“Vaccination programmes can also become a victim of their own success, as some vaccine-preventable disease have become so rare that people can fail to realise the benefits of immunisation”*. The information offered about the diseases for which the GGD vaccinates is very short, and as many people never have experienced the diseases, the seriousness of the diseases is often underestimated. Therefore a more extensive explanation about the diseases, its symptoms and clear statistics from the past could make a difference.
- Information about the risks of not vaccinating. No information is available about the risks of not vaccinating, however there are risks involved which parents might not always consider. For instance their child can catch a disease from a child which does not show any symptoms, because of a vaccination. Moreover infection diseases are very dangerous to babies, so while a child of five get immune naturally by having the measles, he/she can contaminate your baby or another baby (CDC, 2012). The risks of not vaccinating should also be explained, as at this moment only the risks of vaccinations are covered by anti-vaccination movements.
- Bigger perspective of vaccinating. The analysis of the communication channels pointed out that only one short movie of the RIVM informs the parents about the bigger perspective of vaccinating. Vaccinations are not only given to protect an individual but is aiming for herd-immunity in order to protect the weaker of the society and on the long-term for elimination of the infection disease. As the information on this is so limited, it is very likely that parents are not aware of this fact. Research of Leask et al. (2006) found that parents who want to vaccinate, also perceive this as a social responsibility and for this feel even stronger that everybody should vaccinate. Providing more information about the bigger perspective can be an alternative way of framing vaccinations.

Distribution of the information

1 – The internet

The University of California (2012) found in their research that the majority of the people first checks the internet before going to a doctor. This concept remains the same for parents when talking about vaccinations (Questionnaire, 2016), therefore it is important that the information as described above should be offered online. This can be achieved by multiple ways, first of all, in some cases the information is there already but should be made more visible or further elaborated. Lastly pages can be added to the website with extra information on topics which are not yet discussed on the website.

2 – A brochure

A brochure with the information described above, which is mainly handed to parents who are doubting about vaccinations. Many parents will not need this information as they perceive vaccinations as something you just do. For the parents who do need extra information the GGD can provide a special brochure with additional information about vaccinating. Research of Julie Leask et al. (2006) pointed out that people value their doctors' opinion highly when he takes the time to discuss the risks and engage in a dialogue. Handing a brochure with the information they want, can first of all increase this feeling. Second of all it also compensates in case a doctor has less time to speak about all the risks of vaccinations, as the questionnaire pointed out that doctors don't always have time for this. Moreover when it is handed in the form of a brochure and only to people who are really doubting it is also harder for the anti-vaccination movements to do something with this information.

Advantages for the GGD

This recommendation has multiple advantages for the GGD. First of all when they offer more information on their own website, parents don't have to go to other websites, and the GGD stays in control over the information provided to the parents. Moreover, relating this to the key-concepts, transparency is very important for trusting someone (ECDC, 2012). Therefore when information is provided which currently is not good visible or present, it is more likely parents trust the GGD and therefore attach more value to the opinion of the GGD.

Barriers

When more information is offered by the GGD, more points can be questioned by the anti-vaccination movements. Besides that, increasing the amount of information can also be an overload for other parents. At this moment the information provided about vaccinations is short and to the point, when more will be added to this including additional topics of information, this can also have consequences for the parents who currently vaccinate their children and agree with everything the GGD says.

Besides that, even though when the GGD provides more information, parents might still have the need to search for other sources as well and therefore still leading them towards anti-vaccination websites. Recommendation three, however can offer support to parents who want to do this, and ensure that these parents don't fall for non-scientific researches.

7.2 Address the misconceptions

The GGD is recommended to address visibly the misconceptions about vaccinations and the statements made by the anti-vaccination movements and explain the story behind this misconception.

Why?

The information provided by the GGD and anti-vaccination movements is contradicting, and the analysis of anti-vaccination movements pointed out that anti-vaccinators address many misconceptions and also responds to the information provided by the GGD, RIVM and RVP. Responses are made on the Facebook groups and on the websites, NVKP even has a page on its websites where the 49 frequently asked questions to the RIVM have been answered by the NVKP. The NVKP presents its information in such a way, that the information of the RIVM and NVKP can easily be compared as can be seen in image 1. There are many misconceptions about vaccinations and even though the RVP focuses on a few of them in the frequently asked questions e.g. vaccinations don't cause autism, many of the misconceptions remain unanswered or hard to find, from the side of the GGD. By addressing these misconceptions and where they come from, the GGD answers to the misconceptions and parents can learn about the two sides of the misconception.

Tegen welke ziekten worden kinderen volgens het RVP ingeënt ?

RIVM	NVKP
RIVM Rijksinstituut voor Volksgezondheid en Milieu	NVKP Nederlandse Vereniging Kritisch Prikken
De ziekten zijn: difterie, kinkhoest, tetanus, polio, Hib-ziekte, bof, mazelen, rodehond, groep C meningokokkenziekte, pneumokokkenziekte, (voor sommige kinderen) hepatitis B en (voor meisjes) baarmoederhalskanker. Hieronder kunt u kort iets meer lezen over deze ziekten.	In het boek "Ziekten en Vaccins Nader bekeken" uitgegeven door de NVKP vindt u uitgebreide informatie over de ziekten waartegen wordt gevaccineerd en over de vaccins in kwestie.
Difterie Difterie, vroeger ook wel 'kroep' genoemd, wordt veroorzaakt door een bacterie, die via hoesten en niezen van mens op mens wordt overgebracht. Ook door bijvoorbeeld pus uit een wond kun je besmet raken. De difteriebacterie maakt gifstoffen die weefsels beschadigen. Vooral van de bovenste luchtwegen. Op de slijmvliezen van de keel kunnen vliezen ontstaan, waardoor het ademen moeilijk wordt. Kinderen kunnen daardoor zelfs stikken. De gifstoffen kunnen ook de hartspier en het zenuwstelsel beschadigen. Als niet wordt behandeld, overlijdt 30 tot 50 procent van de patiënten. Maar ook met behandeling kan de ziekte dodelijk zijn.	Difterie Difterie kwam voor het laatst in de hongerwinter van 1944/45 in Nederland voor. Difterie ontstaat alleen bij slechte hygiëne en armzalige leef- en voedingsomstandigheden, zoals in een oorlog. Een pasgeborene is tot de leeftijd van 6 maanden beschermd door transplacentaire overdracht van antistoffen en in geringe mate door secretair IgA in moedermelk. Toen er nog nauwelijks behandelingsmogelijkheden waren tot aan het begin van de vorige eeuw, overleed 30 tot 50 procent van de patiënten. Maar in deze tijd zijn er antibiotica om in te zetten als dat nodig is. Bij gevaar om te stikken moet er

Image 1: FAQ's comparison RIVM and NVKP

Many of the arguments and misconceptions made by anti-vaccinators are a result of information taken out of context and improper paraphrasing of scientific sources. Besides the 'general' misconceptions made about vaccinations, the analysis of the Facebook groups have pointed out that after a vaccination-related event has reached the news, there is fully speculated about this in the Facebook groups. For instance the little boy which passed away of diphtheria in March 2016, was a topic which was thoroughly discussed in the groups by the anti-vaccinators and the pro-vaccinators. Many misconceptions were made about the event and many rumours were circulating. Examples of this: it is actually the fault of the vaccinated children that his boy had passed away or that this child was actually vaccinated but they didn't want to say this in the news (Vaccinatietwijfelaars, March 2016).

The questionnaires have pointed out that recent developments concerning vaccinations certainly have an impact on parents' perception about vaccinations. Besides this the parents would like more information from the GGD about recent developments and circulating stories. Therefore it is important that the GGD also responds to these events and explains exactly the facts and how something could have happened.

How to do it

Basically there are two types of actions part of this recommendation. First of all addressing the general misconceptions about vaccinations and secondly responding to vaccination-related events and the circulating stories. The GGD should rebut the misconceptions in an unbiased method while maintaining a high transparency. This transparency can be reached by referencing the sources from which the GGD has retrieved the information. The misconceptions can be addressed in three steps:

1. Describing the misconception which is made.
2. Explaining where the story comes from.
3. Describing the truth.

These two actions require different methods of approach when it comes to the distribution of information.

Addressing the general misconceptions

As described in recommendation 1, this recommendation can also be integrated in recommendation 1. This is mainly the case for addressing the general misconceptions, this can be listed in a brochure or online on the website. Some statements made by anti-vaccination movements online are.

- Improved hygiene and living circumstances – not vaccinations – are primarily responsible for the decreased death by infection diseases (Vaccinvrij, 2016).
- The long-term effects of vaccinations are unknown (NVKP, 2016)
- Governments are aware that vaccinations have plenty of unwelcome side-effects, however they don't speak about this publicly. (Vaccinvrij, 2016)
- There are dangerous components in vaccinations like aluminium, antibiotics etc. (Vaccinvrij, 2016)

Currently the GGD has a newsfeed on the website, where they post information about recent developments. This newsfeed could be made more visible by for instance linking it to its Facebook page. By this way the GGD distributes/answers pro-actively information and parents know better what to believe or not from all the statements made about the story.

Advantages for the GGD

Currently there is little answer online towards all the claims made by anti-vaccination movements. By informing about and explaining the misconceptions, parents get more two-sided information, instead of only from the ant-vaccinators. It gives the GGD also a voice in the circulating rumours and a clear explanation can contribute towards parents gaining more confidence in vaccinations.

Barriers

Barriers of this recommendation can be that parents, who were not aware about the misconceptions made concerning vaccinations, could be triggered by the list, even though the GGD informs about where they come from. Therefore the text should be written very carefully that no doubt whatsoever remains about this misconceptions, as if parents will look for more information on Google, it is likely they end up on a website like Vaccinvrij or NVKP.

7.3 Credibility check-list

The GGD is recommended to provide a check-list to parents, on how they can assess the credibility of a source.

Why?

The questionnaire pointed out that many parents searched for additional information about vaccinations through Google. Despite the fact that recommendation 1 tries to limit this by providing more objective and unbiased information to the parents, it won't prevent the parents from going to websites like NVKP or Vaccinvrij. Because many of the information and sources provided by the anti-vaccinators have a low credibility and transparency, something which is observed in the Facebook groups as well as on the websites, a check-list for the parents is recommended. Links are made to sources with low credibility/transparency or no sources at all are provided. Parents might not be aware of this and take the presented information as the truth. By providing a check-list to parents which they can use for assessing whether a source, website, article etc. is credible and likely to present the truth, parents will be empowered by assessing the presented information. By using a check-list parents will find credible sources themselves about vaccinations.

How to do it

This recommendation can be integrated in recommendation 1, it can be distributed by means of a brochure or can be provided online. An example of the checklist including a description can be found in figure 3.

Nowadays in a time where the internet has become so big that it is hard to see the wood for the trees, it can be difficult to know which website or article to trust. How do you know if something is an opinion, a lie or the truth? In order to give you a helping hand by finding good information about vaccinations, we provide you with a check-list. By means of the check-list it becomes easier to assess which source is credible and whether the information they present is credible.

- ✓ Who is the author? *Is it clear which person/institution/organization is the author? What information do you get when you google the author?*
- ✓ Is the author selling something? *This will compromise the objectivity.*
- ✓ Are references provided? *Are the references included on which the text is based? If there are in-text links, do they redirect to credible appearing websites?*
- ✓ Is the content professional? *Does it exhibit any strong language or grammar mistakes? Are there personal opinions stated?*
- ✓ Is the date of creation current? *You can find this in the footer of a website, data might be outdated.*
- ✓ Is the information objective? *Does it seem complete? Does it seem as if arguments are left out or not?*

Figure 3

Advantages

As it is likely that parents conduct further research, after consulting the website of GGD/RIVM/RVP, it is better to empower parents in this research instead of discouraging them. By providing the check-list parents can find more credible information and compare this to the information provided by the GGD. It helps parents to differentiate what is credible/transparent and what is not, without interference of the GGD.

Barriers

Parents might consider it as too much work to use it, therefore it is important that the list is easy to use and short. Besides this it can also give false assessments, as the list can never provide a full guarantee. For instance an article is assessed as credible according to the list, but when it is not, parents can perceive it as the truth.

7.4 Meetings about vaccinations

The GGD is recommended to introduce meetings about vaccinations with parents who are vaccine-hesitant.

Why?

The parent-doctor consults showed that personal communication is very important for parents, as all the information parents received was based on their personal situation, moreover many parents value the opinion of their doctor highly. Besides that all key-concepts have been met during the consults, except for visibility as this was not applicable. During the consults however, vaccinations are not the main topic but only a part of the consult and doctors indicated they don't always have the time to discuss about the vaccinations. Therefore meetings with vaccine-hesitant parents, or parents who would like to get more information is recommended. Besides that research by Leask et al. (2006) also pointed out that vaccine-hesitant parents have the impression doctors don't always take the time to discuss about vaccinations, this can be prevented by organizing special meetings about vaccinations.

How to do it

The meetings will take place once a month in a health centre, with a group of interested parents. When the meetings take place in a group, parents can also learn from each other's questions. During the meetings parents get the opportunity to share their concerns and get an answer to these concerns by a professional. In order to ensure that enough parents attend these meetings they have to sign up for it. The meetings can be promoted on the website of the GGD, by the midwife when someone is pregnant but also by the doctor. There are a few points which have to be taken into account in order to make the meetings productive and fruitful.

- The timing of the meeting. → Preferably when the mother is pregnant and the parents are still orientating on the topic. Or a few months after the baby is born, as Paulien Voskuil and another doctor (questionnaire doctors) said, that just after the baby is born parents are not open to other opinions and influences. Obviously when a parent want to attend a meeting, they shouldn't be refused, only it is recommended inform parents about this meetings during one of the aforementioned periods.

- The strength of opinion of the parents. → This can of course only be assessed through personal communication, but when the opinions are very strong against vaccinations it is better to leave it by it. When they have a very strong opinion about vaccinations it is not very likely that they would change their opinion, moreover it is risky as the possibility arises that they influence other parents attending the meetings.
- Opinions might change with a new-born. → When parents made a choice about vaccinations for their firstborn, this does not necessarily means they stick to their choice with a second child. With a new child, new risks arise and parents might be more open to vaccinations. Therefore once parents made a choice, they can with a new-born child stand open for new opinions.

Proposed time table

1. Short presentation about the information as described in recommendation 1.
2. Questions about this
3. Help for how parents can soothe their child
4. Open Q&A for parents
5. Handing out brochures to parents about vaccinations

Advantages

The meetings show that the GGD cares about vaccinations and like to invest more time in vaccine-hesitant parents. It provides more information to parents and the GGD has more control about the answers the parents get on their questions. These meetings could be the trigger for parents to vaccinate their children.

Barriers

There are time and money constraints, it is possible that the GGD doesn't have a budget for this or finds doctors who want to do this. Moreover it is hard to estimate, whether parents will attend these meetings or not. When they sign-up the GGD knows what to expect, however it doesn't mean necessarily that the parents will show up. Moreover the parents can also negatively influence each other, by asking questions about matters which other parents didn't even think about.

8.5 Planning implementation of advice

The advice can be implemented at the point the GGD has the money and the manpower for this. As recommendation 2 and 3 can be integrated with recommendation 1 these are put in the same schedule, recommendation 4 requires a different planning. The different steps for implementation of the recommendations are described.

Recommendation	Step 1	Step 2	Step 3	Step 4
1	Analysing the content on the website and determine which information needs more elaboration	Writing of new texts on the website + writing the content of recommended information.	Add new content to the website.	Creating brochures for vaccine-hesitant parents with new content.
2 – 1 (general misconceptions)	Creating list of misconceptions to be addressed	Writing of the texts about the misconceptions	Add new content to the website	Adding new content to brochure.
2-2 (circulating stories)	Promote the Facebook group of GGD Groningen and gain more likes	Analysing the web and stay up-to-date with developments	When new story appears, react to this	
3	Creating checklist		Add new content to the website	Adding new content to the brochure

Table 8: planning

Recommendation	Step 1	Step 2	Step 3	Step 4
4	Specify the activities and length for the vaccination meetings	Promote the vaccination meetings	Implementing the vaccination meetings once a month	Evaluate meetings after three months implementation and determine whether to increase frequency change the activity etc.

Table 9: planning

References

- Adler, R., & Towne, N. (1978). *Looking out/looking in* (2nd ed.). New York: Holt, Rinehart and Winston.
- ASTHO (August, 2009) *Communicating effectively about vaccines; New communication resources for health officials*. Retrieved from: <http://www.vdh.state.va.us/clinicians/pdf/vaccinations.pdf>
- Bargh, J.A., Chen, M., Burrows, L. (1996) Automaticity of Social behaviour: Direct effects of trait construct and stereotype activation on action. *Journal of personality and social psychology*. 71, 230-244. Retrieved from: http://www.yale.edu/acmelab/articles/bargh_chen_burrows_1996.pdf
- Bean, S.J. (2011) Emerging and continuing trends in vaccine opposition website content. *Vaccine*, 29, 1874-1880. Doi:10.1016/j.vaccine.2011.01.003
- Berry college (08/12/2015) Evaluating web resources: What makes a credible website? Retrieved 12/05/2016 from: <http://libguides.berry.edu/evaluatingweb>
- Betsch, C., Brewer, N.T., Brocard, P., Davies, P., Gaissmaier, W., Haase, N., ...Stryke, M. (2012) Opportunities and challenges of Web 2.0 for vaccination decisions. *Vaccine*, 30, 3727-3733, Doi:10.1016/j.vaccine.2012.02.025
- Blume, S. (2006) Anti-vaccination movements and their interpretations. *Social science & medicine*, 62, 628-642. Doi:10.1016/j.socscimed.2005.06.020
- CDC (March 2012) If you choose not to vaccinate your child, understand the risks and responsibilities. Retrieved from: <http://www.cdc.gov/vaccines/hcp/conversations/downloads/not-vacc-risks-color-office.pdf>
- Edwards, J. (07/06/2015) Doctors against vaccines – *hear from those who have done the research*. Retrieved from: <http://www.organiclifestylemagazine.com/doctors-against-vaccines-hear-from-those-who-have-done-the-research>
- European Centre for Disease Prevention and Control. (April, 2012) *Communication on immunisation –building trust*. Stockholm: ECDC. Retrieved from: <http://ecdc.europa.eu/en/publications/Publications/TER-Immunisation-and-trust.pdf>
- Frankema, D. (2016, May). *Wie is Door Frankema?* Retrieved from: <https://vaccinvrij.nl/wie-is-door-frankema/>
- GGD Groningen (n.d.) *Over GGD Groningen*. Retrieved 15/02/2016 from: <http://ggd.groningen.nl/over-ggd-groningen>
- GGD Groningen (2014) *Het gezicht van GGD Groningen*. Retrieved from: <http://ggd.groningen.nl/over-ggd-groningen/jaarverslag-2014/GGDJaarverslag2014.pdf>
- GGD Groningen. (n.d.). *Veelgestelde vragen over de vaccinaties voor 9-jarigen*. Retrieved from: <http://ggd.groningen.nl/infectieziekten-hygiene/vaccinaties-voor-kinderen/bmr-en-dtp-vaccinaties-voor-kinderen-van-9-jaar/veelgestelde-vragen-bmr-dtp>
- GGD Groningen. (n.d.). *GGD Groningen [Facebook fan page]*. Retrieved April 19, 2016, from: <https://www.facebook.com/ggdgroningen/?fref=ts>
- GGD Groningen. (2014, January). *GGD Groningen Jeugdgezondheidszorg [Twitter]*. Retrieved April 19, 2016, from: <https://twitter.com/jgzgroningen>
- GGD Groningen. (2015, April). *Pijn bij vaccinaties verlichten: Wat u als ouder kan doen*. Retrieved from: <http://ggd.groningen.nl/jeugd-opvoeding/informatie-en-opvoedings-folders/Pijnbijvaccinatiesverlichten.pdf>
- GGD Groningen. (2016). *Vaccinaties voor kinderen*. Retrieved from: <http://ggd.groningen.nl/infectieziekten-hygiene/vaccinaties-voor-kinderen>
- GGD Groningen. (2016). *BMR en DTP vaccinaties voor kinderen van 9 jaar*. Retrieved from: <http://ggd.groningen.nl/infectieziekten-hygiene/vaccinaties-voor-kinderen/bmr-en-dtp-vaccinaties-voor-kinderen-van-9-jaar>

- Gust DA, Darling N, Kennedy A, Schwartz B. Parents with doubts about vaccines: which vaccines and reasons why. *Pediatrics*. 2008; 122(4):718 –725. Retrieved from: <http://pediatrics.aappublications.org/content/pediatrics/early/2010/03/01/peds.2009-1962.full.pdf>
- Healy, C. M., Pickering, L. K. (29/11/2010) How to communicate with vaccine-hesitant parents. Retrieved from: http://pediatrics.aappublications.org/content/pediatrics/127/Supplement_1/S127.full.pdf
- Kata, A. (2009) A postmodern Pandora's box: *Anti-vaccination misinformation on the internet*. *Vaccine*, 28, 1709-1716. Doi:10.1016/j.vaccine.2009.12.022
- Kata, A. (2012) Anti-vaccine activists, Web 2.0, and the postmodern paradigm – An overview of tactics and tropes used online by the anti-vaccination movement. *Vaccine*, 30, 3778-3789. Doi:10.1016/j.vaccine.2011.11.112
- Kirsten Feist (02/02/2016) Evaluating internet sources. *University of Illinois*. Retrieved from: <http://www.library.illinois.edu/ugl/howdoi/webeval.html>
- Leask, J., Chapman, S., Hawe, P., Burgess, M. (23/05/2006) What maintains parental support for vaccination when challenged by anti-vaccination messages? A qualitative study. *Vaccine*, 24: 7238-7245
- Nederlandse Vereniging Kritisch Prikken. (2013). NVKP. Retrieved from <http://nvkp.nl/>
- Nederlandse Vereniging Kritisch Prikken. (2013). Informatie. Retrieved from: <http://nvkp.nl/informatie/>
- Nederlandse Vereniging Kritisch Prikken. (2013). Over NVKP. Retrieved from: <http://nvkp.nl/informatie/over-nvkp/>
- Nederlandse Vereniging Kritisch Prikken. (2013). Ziekten en Vaccins. Retrieved from: <http://nvkp.nl/informatie/ziekten-en-vaccins/>
- Nederlandse Vereniging Kritisch Prikken. (2013). Ziekten en Vaccins Mazelen. Retrieved from: <http://nvkp.nl/informatie/ziekten-en-vaccins/mazelen/>
- Nederlandse Vereniging Kritisch Prikken. (2013). Nadelen van vaccineren. Retrieved from: <http://nvkp.nl/informatie/artikelen/>
- Nederlandse Vereniging Kritisch Prikken. (2013). Ervaringsverhalen. Retrieved from: <http://nvkp.nl/informatie/ervaringsverhalen/>
- Nederlandse Vereniging Kritisch Prikken. (2013). Ik wou dat ik het eerder had geweten. Retrieved from: <http://nvkp.nl/informatie/ervaringsverhalen/ik-wou-dat-ik-het-eerder-had-geweten/>
- Nederlandse Vereniging Kritisch Prikken. (2013). Autistisch na BMR vaccinatie; Lareb ontkent verband. Retrieved from: <http://nvkp.nl/informatie/ervaringsverhalen/autistisch-na-bmr-vaccinatie-lareb-ontkent-verband/>
- Nederlandse Vereniging Kritisch Prikken. (2013). Literatuur. Retrieved from: <http://nvkp.nl/informatie/literatuur/>
- Nederlandse Vereniging Kritisch Prikken. (2013). Vacatures. Retrieved from: <http://nvkp.nl/informatie/vacatures/>
- Nederlandse Vereniging Kritisch Prikken. (2013). Veelgestelde vragen over vaccinaties. Retrieved from: <http://nvkp.nl/veelgestelde-vragen/>
- Nederlandse Vereniging Kritisch Prikken. (2013). Webshop. Retrieved from: <http://nvkp.nl/webshop/>
- Nederlandse Vereniging Kritisch Prikken. (2013). Behandelaars. Retrieved from: <http://nvkp.nl/behandelaars/behandelaars-locator/>
- Nederlandse Vereniging Kritisch Prikken. (2013). Contact. Retrieved from: <http://nvkp.nl/contact/>
- Nederlandse Vereniging Kritisch Prikken. (2016). Nieuws. Retrieved from <http://nvkp.nl/informatie/nieuws/>
- Noelle-Neumann, E. (1974). The spiral of silence: A theory of public opinion. *Journal Of communication*, 24(2), 43-51.
- Nurse holding an injection needle (17/11/2014) Retrieved from:http://classroomclipart.com/clipart-view/Animations/Health/nurse-holding-a-injection-needle-animated-gif_gif.htm

Rijksvaccinatieprogramma. (n.d.). Rijksvaccinatieprogramma. Retrieved from: <http://www.rijksvaccinatieprogramma.nl/>

Rijksvaccinatieprogramma. (n.d.). De vaccinaties. Retrieved from: http://rijksvaccinatieprogramma.nl/De_vaccinaties

Rijksvaccinatieprogramma. (n.d.). De ziekten. Retrieved from: http://rijksvaccinatieprogramma.nl/De_ziekten

Rijksvaccinatieprogramma. (n.d.). Bijwerkingen. Retrieved from: <http://rijksvaccinatieprogramma.nl/Bijwerkingen>

Rijksvaccinatieprogramma. (n.d.). Veelgestelde vragen. Retrieved from: http://rijksvaccinatieprogramma.nl/Veelgestelde_vragen

Rijksvaccinatieprogramma. (n.d.). Over Rijksvaccinatieprogramma. Retrieved from: http://rijksvaccinatieprogramma.nl/Over_Rijksvaccinatieprogramma

Rijksvaccinatieprogramma. (n.d.). Contact. Retrieved from: <http://rijksvaccinatieprogramma.nl/Contact>

Rijksinstituut voor Volksgezondheid en Milieu (08/02/2010) Geen verband tussen vaccinatie en autisme: *omstreden artikel teruggetrokken*. Retrieved 22/02/2016 from: http://www.rivm.nl/Documenten_en_publicaties/Algemeen_Actueel/Nieuwsberichten/2010/Geen_verband_tussen_vaccinatie_en_autisme_omstreden_artikel_teruggetrokken?sp=Y3RsMT1uZXZzbWVzc2FnZTtdWVVeT0oMTU2NzU0IDE1Njc1NCk7cml2bXE9ZmFsc2U7SU5MSUJSQVJZPXRydWU7U0lURUxBTKdVQUdFPW5sO3NIYXJjaGJhc2U9NTA7c2VhcmNocmFuZ2U9NTA7Y3RsMT1uZXZzbWVzc2FnZTtdWVVeT0oMTU2NzU0IDE1Njc1NCk7c29ydGZpZWxkPXB1Ymxcpc2hkYXRlO3NvcnRyZXZlcnNlZD10cnVlOw==&query=&pagenr=2&result=rivmp%3A49191

Rijksinstituut voor Volksgezondheid en Milieu (n.d.) Bescherm uw kind tegen 12 infectieziekten. *Rijksvaccinatieprogramma*. Retrieved from: http://www.rivm.nl/dsresource?objectid=rivmp:51254&type=org&disposition=inline&ns_nc=1

Rijksinstituut voor Volksgezondheid en Milieu. (2011, October 13). Wat is het Rijksvaccinatieprogramma? [Video file]. Retrieved from: http://www.rivm.nl/Documenten_en_publicaties/Algemeen_Actueel/Multimedia/Infectieziekten/Rijksvaccinatieprogramma/Wat_is_het_Rijksvaccinatieprogramma/Download/Wat_is_het_Rijksvaccinatieprogramma

Rijksinstituut voor Volksgezondheid en Milieu (n.d.). Film Wat is groepsimmunititeit [Video file]. Retrieved from: http://www.rivm.nl/Onderwerpen/R/Rijksvaccinatieprogramma/Media/Wat_is_groepsimmunititeit/Film_Wat_is_groepsimmunititeit

Rijksinstituut voor Volksgezondheid en Milieu (n.d.). Voor kinderen. Retrieved from: http://www.rivm.nl/Onderwerpen/R/Rijksvaccinatieprogramma/Voor_kinderen

Rijksinstituut voor Volksgezondheid en Milieu (n.d.). Rijksvaccinatieprogramma. Retrieved from: <http://www.rivm.nl/Onderwerpen/R/Rijksvaccinatieprogramma>

Rijksinstituut voor Volksgezondheid en Milieu (2011, October 13). De inenting van het Rijksvaccinatieprogramma [Video file]. Retrieved from: http://www.rivm.nl/Documenten_en_publicaties/Algemeen_Actueel/Multimedia/Infectieziekten/Rijksvaccinatieprogramma/De_inenting_van_het_Rijksvaccinatieprogramma/Download/De_inenting_van_het_Rijksvaccinatieprogramma

Rijksinstituut voor Volksgezondheid en Milieu (2011, October 13). Om welke ziekten gaat het Rijksvaccinatieprogramma? [Video file]. Retrieved from: http://www.rivm.nl/Documenten_en_publicaties/Algemeen_Actueel/Multimedia/Infectieziekten/Rijksvaccinatieprogramma/Om_welke_ziekten_gaat_het_Rijksvaccinatieprogramma/Download/Om_welke_ziekten_gaat_het_Rijksvaccinatieprogramma

Rijksinstituut voor Volksgezondheid en Milieu (2013, March 27). Veiligheid van vaccinaties in het Rijksvaccinatieprogramma [Video file]. Retrieved from: http://www.rivm.nl/Documenten_en_publicaties/Algemeen_Actueel/Multimedia/Infectieziekten/Rijksvaccinatieprogramma/Veiligheid_van_vaccinaties_in_het_Rijksvaccinatieprogramma

Rijksinstituut voor Volksgezondheid en Milieu (2014, January 23). Vaccinatiebewijs. Retrieved from: http://www.rivm.nl/dsresource?objectid=rivmp:266374&type=org&disposition=inline&ns_nc=1

Rijksinstituut voor Volksgezondheid en Milieu (2015, August 03). Vaccinaties voor kinderen van 4 jaar. Retrieved from: http://www.rivm.nl/Documenten_en_publicaties/Algemeen_Actueel/Brochures/Infectieziekten/Rijksvaccinatiep

ogramma/Vaccinaties_voor_kinderen_van_4_jaar?sp=Y3RsMT1oYW5kb3V0O3F1ZXJ5PSgxNTY3NTQpO0IOTEICUKFSWT10cnVIO1NJVEVMQU5HVUFHRT1ubDtzZWVY2hiYXNlPTA7c2VhcmNocmFuZ2U9NTA7c2VhcmNoZXhwcmVz c2lvcj0oY3RsMSkgQU5EIEIOTEICUKFSWSBBTkQgU0lURUxBTKdVQUdFO3NvcnRmaWVsZD1wdWJsaXNoZGF0ZTtz b3J0cmV2ZXJzZWQ9dHJ1ZTs=&query=&pagenr=1&result=rivmp%3A52653

Rijksinstituut voor Volksgezondheid en Milieu (2015, July). Vaccinaties voor peuters van 14 maanden. Retrieved from: http://www.rivm.nl/dsresource?objectid=rivmp:52652&type=org&disposition=inline&ns_nc=1

Rijksinstituut voor Volksgezondheid en Milieu (2015, July). Vaccinaties voor baby's van 6-9 weken, 3,4 en 10,11 maanden. Retrieved from: http://www.rivm.nl/dsresource?objectid=rivmp:52644&type=org&disposition=inline&ns_nc=1

Rijksinstituut voor Volksgezondheid en Milieu (2015, July). Vaccinaties voor kinderen van 9 jaar. Retrieved from: http://www.rivm.nl/dsresource?objectid=rivmp:180590&type=org&disposition=inline&ns_nc=1

Salzberg, S. (20/09/2015) Donald Trump spouts dangerous anti-vaccine nonsense. Ben Carson's reaction is worse. *Forbes*. Retrieved from: <http://www.forbes.com/sites/stevensalzberg/2015/09/20/donald-trump-spouts-dangerous-anti-vaccine-nonsense-ben-carsons-response-is-worse/#7a3711961bd5>

Saunders, M., Lewis, P., Thornhill, A. (2009). *Research methods for business students*. Essex: Pearson Professional Limited.

Science-web (2016) Enqueteren hoe werkt dat? Retrieved 13/05/2016 from: <http://science-web.nl/enqueteren-hoe-werkt-dat-2/enquete-analyseren-2>

Tafari, S., Gallone, M.S., Capelli, M.G., Martinelli, D., Prato, R., Germinario, C. (2014) Addressing the anti-vaccination movement and the role of HCWs. *Vaccine*, 32, 4860-4865. <http://dx.doi.org/10.1016/j.vaccine.2013.11.006>

University of California- Davis (6/07/2012) Patients trust doctors but consult the internet. *Science Daily*. Retrieved from: www.sciencedaily.com/releases/2012/07/120706184421.htm

US department of health & human services. (September 2014) Finding and evaluating online health resources. *National institutes of health*. Retrieved from: https://nccih.nih.gov/sites/nccam.nih.gov/files/Evaluating_Online_Resources_08-11-2015.pdf

Vaccinatiegekte. (2013). Vaccinatiegekte [Facebook group]. Retrieved April 29, 2016, from: <https://www.facebook.com/groups/239667059418249/?fref=ts>

VaccinatieTwijfelaars. (2013). VaccinatieTwijfelaars [Facebook group]. Retrieved May 01, 2016, from: <https://www.facebook.com/groups/287992694698294/?fref=ts>

Vaccinvrij. (2016, May). Vaccin Vrij! Retrieved from: <https://vaccinvrij.nl/>

Vaccinvrij. (2016, May). Ouders. Retrieved from: <https://vaccinvrij.nl/ouders/>

Vaccinvrij. (2016, May). Ouderplatform. Retrieved from: <https://vaccinvrij.nl/ouderplatform/>

Vaccinvrij. (2016, May). Enquête. Retrieved from: <https://vaccinvrij.nl/enquete/>

Vaccinvrij. (2016, May). Vragen aan artsen en beleidsmakers. Retrieved from: <https://vaccinvrij.nl/vragen-artsen-beleidsmakers/>

Vaccinvrij. (2016, May). Doe je mee? Retrieved from: <https://vaccinvrij.nl/doe-je-mee/>

Vaccinvrij. (2016, May). Professionals. Retrieved from: <https://vaccinvrij.nl/professionals/>

Vaccinvrij. (2016, May). Artsen. Retrieved from: <https://vaccinvrij.nl/artsen/>

Vaccinvrij. (2016, May). Wetenschappers. Retrieved from: <https://vaccinvrij.nl/wetenschappers/>

Vaccinvrij. (2016, May). Journalisten. Retrieved from: <https://vaccinvrij.nl/journalisten/>

Vaccinvrij. (2016, May). Rechters/Advocaten. Retrieved from: <https://vaccinvrij.nl/rechters-advocaten/>

Vaccinvrij. (2016, May). Keuzes. Retrieved from: <https://vaccinvrij.nl/keuzes/>

- Vaccinrij. (2016, May). Rijksvaccinatieprogramma (RVP). Retrieved from: <https://vaccinrij.nl/rijksvaccinatieprogramma-r>
- Vaccinrij. (2016, May). Hepatitis-B vaccin. Retrieved from: <https://vaccinrij.nl/hepatitis-b-vaccin/>
- Vaccinrij. (2016, May). Tetanus-vaccin. Retrieved from: <https://vaccinrij.nl/tetanus-vaccin/>
- Vaccinrij. (2016, May). Baarmoederhalskanker-vaccin (HPV-vaccin). Retrieved from: <https://vaccinrij.nl/baarmoederhalskanker-vaccin-hpv-vaccin/>
- Vaccinrij. (2016, May). Toekomstige vaccins: verplicht of vrijwillig? Retrieved from: <https://vaccinrij.nl/toekomstige-vaccins/>
- Vaccinrij. (2016, May). Meer info. Retrieved from: <https://vaccinrij.nl/meer-info/>
- Vaccinrij. (2016, May). Veelgestelde vragen. Retrieved from: <https://vaccinrij.nl/veelgestelde-vragen/>
- Vaccinrij. (2016, May). Bijsluiters. Retrieved from: <https://vaccinrij.nl/bijsluiters/>
- Vaccinrij. (2016, May). Vaccin Vrij Blog. Retrieved from: <https://vaccinrij.nl/blog/>
- Vaccinrij. (2016, May). Actueel. Retrieved from: <https://vaccinrij.nl/aktueel/>
- Vaccinrij. (2016, May). Over ons. Retrieved from: <https://vaccinrij.nl/over-ons/>
- Vaccinrij. (2016, May). Waar staan wij voor? Retrieved from: <https://vaccinrij.nl/waar-staan-wij-voor/>
- Vaccinrij. (2016, May). Contact. Retrieved from: <https://vaccinrij.nl/contact/>
- Vader, E., Van der Lee, A., & Van der Kamp-Wiedema, W. (2016, May). Wie zijn de medewerkers van Vaccinrij? Retrieved from: <https://vaccinrij.nl/wie-zijn-de-medewerkers-van-vaccinrij/>
- Verschuren, P. & Doorewaard, H. (2010). Designing a Research Project. The Hague: Eleven International Publishing.
- Volksgezondheid (2016) Vaccinaties > cijfers en context > trends. Retrieved 03/02/16 from: <https://www.volksgezondheidenzorg.info/onderwerp/vaccinaties/cijfers-context/trends>
- Vos, M., Otte, J., Linders, P. (2003). *Setting up a strategic communication plan*. Lemma Publishers: Utrecht
- VTM nieuws (17/03/2016) Kleuter van 3 sterft aan difterie. Retrieved from: <http://nieuws.vtm.be/binnenland/183004-kleuter-van-3-sterft-aan-difterie>
- Wakefield, A. J., Murch, S. H., Anthony, A., Linell, J., Casson, D.M., Malik M., ... Walker-Smith, J.A. (28/02/1998) Ileal-lymphoid -nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children. *The Lancet*. 351, p. 637-641. Retrieved from: [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(97\)11096-0/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(97)11096-0/fulltext)
- Witteman, H.O., Zikmund-Fisher, B.J. (2012) The defining characteristics of Web 2.0 and their potential influence in the online vaccination debate. *Vaccine*, 30, 3734-3740, Doi: 10.1016/j.vaccine.2011.12.039
- World Health Organization (2013) Vaccine safety events: managing the communication response. Retrieved from: http://www.who.int/vaccine_safety/initiative/communication/en/

Appendix

I. Questionnaire Parents.....	51
II. Questionnaire doctors.....	54
III. Outcomes questionnaire parents.....	57
IV. Outcome questionnaire doctors.....	60
V. Content on the website of GGD Groningen.....	64
VI. Content on the website of Rijksvaccinatieprogramma.....	66
VII. Content on the website of the RIVM.....	69
VIII. Analysis letters.....	73
IX. Facebook page of GGD Groningen.....	73
X. Twitter page of GGD Groningen and JGZ.....	73
XI. Content on the website of NVKP.....	76
XII. Content on the website Vaccinvrij.....	82
XIV. Facebook page of Vaccinatiegekte.....	90
XV. Facebook page of Vaccinatietwijfelaars.....	106
XVI. Letters sent to the parents.....	124
XVII. Notes and analysis consults doctor- Parents.....	128

I. Questionnaire Parents

Beste ouder,

Dit is een korte enquête als onderdeel van een onderzoek naar communicatie omtrent kindervaccinaties. U zou van grote hulp zijn wanneer u deze korte enquête invult. Mocht u iets toe te voegen hebben aan deze enquête of vragen hebben over het onderzoek, dan kunt u mailen naar: nenakreeft@gmail.com.

Alvast bedankt voor uw medewerking.

Met vriendelijke groet,

Nena Kreeft

Ik ben een:

Man

Vrouw

Hoe oud bent u?

.....

Hoe oud is uw kind/zijn uw kinderen?

.....

1. Laat u uw kind(eren) vaccineren?

Ja

Nee

Wij hebben een aangepast vaccinatie schema

2. Hebt u ooit getwijfeld over het vaccineren van uw kind(eren)?

Ja

Nee

Soms

3. Is voor u de mening van een arts belangrijk?

1 2 3 4 5

Zelden Altijd

4. Begrijpt u alles wat de GGD arts u vertelt?

1 2 3 4 5

Zelden Altijd

5. Wanneer u een gesprek voert met een GGD arts, is dit een dialoog?

1 2 3 4 5

Zelden Altijd

6. Bent u van mening dat de GGD u goed op de hoogte houdt omtrent ontwikkelingen rondom vaccinaties?

Voorbeeld: over medische ontwikkelingen maar ook berichten over vaccinaties in het nieuws.

- Ja
- Nee

7. Vindt u de informatie die door de GGD wordt verstrekt omtrent vaccinaties duidelijk?

1 2 3 4 5
Zelden Altijd

8. Bent u van mening dat de informatie die wordt verstrekt door de GGD omtrent vaccinaties compleet is?

1 2 3 4 5
Zelden Altijd

9. Zoekt u extra informatie op over vaccinaties van externe bronnen?

- Ja
- Nee
- Soms

Zo ja, waar zoekt u deze en waarom?

.....
.....
.....

10. Wordt het onderwerp vaccinaties besproken in uw omgeving (familie, vrienden, burens)?

1 2 3 4 5
Zelden Altijd

11. Is voor u de mening van uw naasten (familie, vrienden, burens) belangrijk?

1 2 3 4 5
Zelden Altijd

12. Laat u zich beïnvloeden door uw omgeving omtrent vaccinaties?

1 2 3 4 5
Zelden Altijd

13. Laat u zich beïnvloeden door nieuwsberichten omtrent vaccinaties?

1 2 3 4 5
Zelden Altijd

14. Mist u iets in de communicatie van de GGD?

Ja namelijk.....

.....

15. Komt u wel eens in aanraking met personen/groepen die tegen vaccinaties zijn en dit expliciet uiten?

- Ja
- Nee
- Soms

16. Indien ja, op welke manier?

- Social media
- Websites
- Persoonlijke omgeving
- Via mijn kind

Heeft u vraag 15 beantwoord met ja of soms? Ga dan naar vraag 17, heeft u dit niet, ga dan direct door naar vraag 18.

17. Vindt u de argumenten tegen vaccinaties duidelijk?

- 1 2 3 4 5
Zelden Altijd

18. Kunt u zich vinden in de argumenten tegen vaccinaties?

- 1 2 3 4 5
Zelden Altijd

19. Vindt u dat personen/groepen die tegen vaccinaties zijn, goed op de hoogte zijn van recente ontwikkelingen en wetenschappelijke onderzoeken?

- 1 2 3 4 5
Zelden Altijd

20. Wilt u nog iets toevoegen aan deze enquête?

.....
.....
.....
.....
.....
.....

Beste arts,

Deze enquête is onderdeel van een onderzoek naar de communicatie van de GGD in opdracht van arts Paulien Voskuil. Het doel van het onderzoek is om advies te leveren aan de GGD over hoe zij haar communicatie kan inrichten omtrent kinder-vaccinaties. Dit, om toenemende commotie veroorzaakt door anti-vaccinatie bewegingen te limiteren en het vertrouwen van vaccinatie-twijfelaars in vaccinaties te stimuleren. Voor dit onderzoek is het erg belangrijk om inzage te krijgen in alle aspecten van de communicatie tussen de GGD en ouders en daarbij óók de communicatie tussen arts en ouder. Het zou erg helpen als u (geheel anoniem) mee wilt werken. Mocht u vragen hebben over het onderzoek, of iets toe te voegen hebben aan deze enquête dan kunt u altijd mailen naar: nenakreeft@gmail.com. Alvast bedankt voor uw medewerking!

1. Ik ben een: Man/vrouw

2. Hoe oud bent u?.....

3. Ik voer zelf altijd de gesprekken met ouders over het vaccineren van hun kinderen.

- Ja
- Nee
- Zo veel mogelijk
- Liever niet

4. Ik heb begrip voor ouders die niet willen vaccineren of de voorkeur hebben voor een aangepast vaccinatie schema

	1	2	3	4	5	6	
Zelden	<input type="radio"/>	Altijd					

5. Wanneer ik een gesprek voer met ouders over een aangepast vaccinatie-schema verloopt dit gesprek rustig.

	1	2	3	4	5	6	
Zelden	<input type="radio"/>	Altijd					

6. Geef aan wat het meeste op u van toepassing is

- Ik vertel ouders altijd over de mogelijke bijwerkingen van vaccinaties
- Ik vertel alleen over de mogelijke bijwerkingen wanneer ouders hiernaar vragen
- Ik vertel ouders liever niet over de mogelijke bijwerkingen van vaccinaties
- Ik ontwijk het onderwerp: mogelijke bijwerkingen van vaccinaties

7. Ik ben nieuwsgierig naar het perspectief van ouders als het gaat om vaccinaties

	1	2	3	4	5	6	
Nooit	<input type="radio"/>	Altijd					

8. Wanneer ik op de hoogte ben van het perspectief van de ouders omtrent vaccinaties, belicht ik mijn perspectief omtrent vaccinaties

	1	2	3	4	5	6	
Nooit	<input type="radio"/>	Altijd					

9. Ik neem de tijd om het gesprek aan te gaan met ouders over vaccinaties.

- Ja
- Nee
- Soms
- Alleen als ik tijd heb

10. Ik zie het contact tussen mij en ouders als positieve investering in onze relatie

- Ja
- Nee
- Soms

11. Ouders begrijpen mijn taal gebruik.

- Ja
- Nee
- Ik denk het wel
- Ik kan dat niet inschatten

12. Ik verzeker mij er van dat ouders mij begrijpen. Dit doe ik door ernaar te vragen en/of vragen te stellen.

	1	2	3	4	5	6	
Zelden	<input type="radio"/>	Altijd					

13. Ouders lijken bij gesprekken bij voorbaat al goed geïnformeerd te zijn over vaccinaties.

1 2 3 4 5 6
Zelden Altijd

14. Ik merk dat ouders zich laten beïnvloeden door hun omgeving als het op vaccinaties aankomt.

1 2 3 4 5 6
Zelden Altijd

**15. Ik merk dat na gebeurtenissen omtrent vaccineren, ouders bezorgder zijn.
Voorbeeld: De groningse baby van 3 weken die aan kinkhoest is overleden**

1 2 3 4 5 6
Zelden Altijd

16. Ik ben mij er van bewust dat ik een bijdragende factor kan zijn voor ouders om wel of niet te vaccineren.

1 2 3 4 5 6
Zelden Altijd

17. Ik ben op de hoogte van recente ontwikkelingen omtrent vaccinaties.

1 2 3 4 5 6
Zelden Altijd

18. De informatie verstrekt door de GGD aan ouders (denk aan: brochures, brieven, websites etc.) is compleet en heeft geen aanpassingen nodig

1 2 3 4 5 6
Oneens Eens

**Mocht u nog iets willen toevoegen aan deze enquête , zoals punten van verbetering of valkuilen.
Dan vraag ik u dit hier in te vullen, of een mail te sturen naar: nena.kreft@gmail.com**

III. Outcomes questionnaire parents

Questions	1	2	3	4	5	6	7	8	9
Average	1 1/7	2	4	4 4/7	4	1 2/7	4	3 3/4	2
Standard error	0	0	1/8	0	1/6	0	1/8	1/7	1/9
Median	1	2	4	5	4	1	4	4	2
Mode	1	2	4	5	5	1	4	3	2
Standard deviation	1/2	1/2	1	1/2	1 1/8	1/2	8/9	1	7/9
Sample variance	1/4	2/7	7/8	2/7	1 2/7	1/5	4/5	1	3/5
Kurtosis	10 4/5	3/4	8/9	- 5/8	2/3	-1	1 3/5	- 2/7	-1 1/3
skewness	3 1/2	-0	- 8/9	- 3/4	-1	1	-1	- 1/3	- 1/7
Range	2	2	4	2	4	1	4	4	2
Minimum	1	1	1	3	1	1	1	1	1
Maximum	3	3	5	5	5	2	5	5	3
Sum	57	96	199	229	197	63	198	183	104
Amount	50	50	50	50	50	49	49	49	50

Questions	10	11	12	13	15	16	17	18	19
Average	3	3	1 8/9	2 5/6	#GETAL!	2 3/8	3 3/7	2 2/3	3
Standard error	1/6	1/6	1/8	1/7	1/9	1/8	1/6	1/5	1/6
Median	3	3	2	3	2	3	3	3	3
Mode	4	3	1	3	2	3	3	3	3
Standard deviation	1 1/5	1 1/7	1	1	3/4	6/7	1	1 1/3	1 1/8
Sample variance	1 2/5	1 1/3	5/6	1	4/7	3/4	1 1/7	1 3/4	1 1/4
Kurtosis	- 4/5	- 4/9	-1 1/3	- 2/7	-1 1/7	-1	- 2/3	-1 1/6	- 1/3
skewness	- 1/5	-0	3/8	- 2/3	1/3	- 3/5	- 1/9	0	0
Range	4	4	3	3	2	3	4	4	4
Minimum	1	1	1	1	1	1	1	1	1
Maximum	5	5	4	4	3	4	5	5	5
Sum	153	151	95	142	90	100	127	133	140
Amount	50	50	50	50	50	42	37	50	48

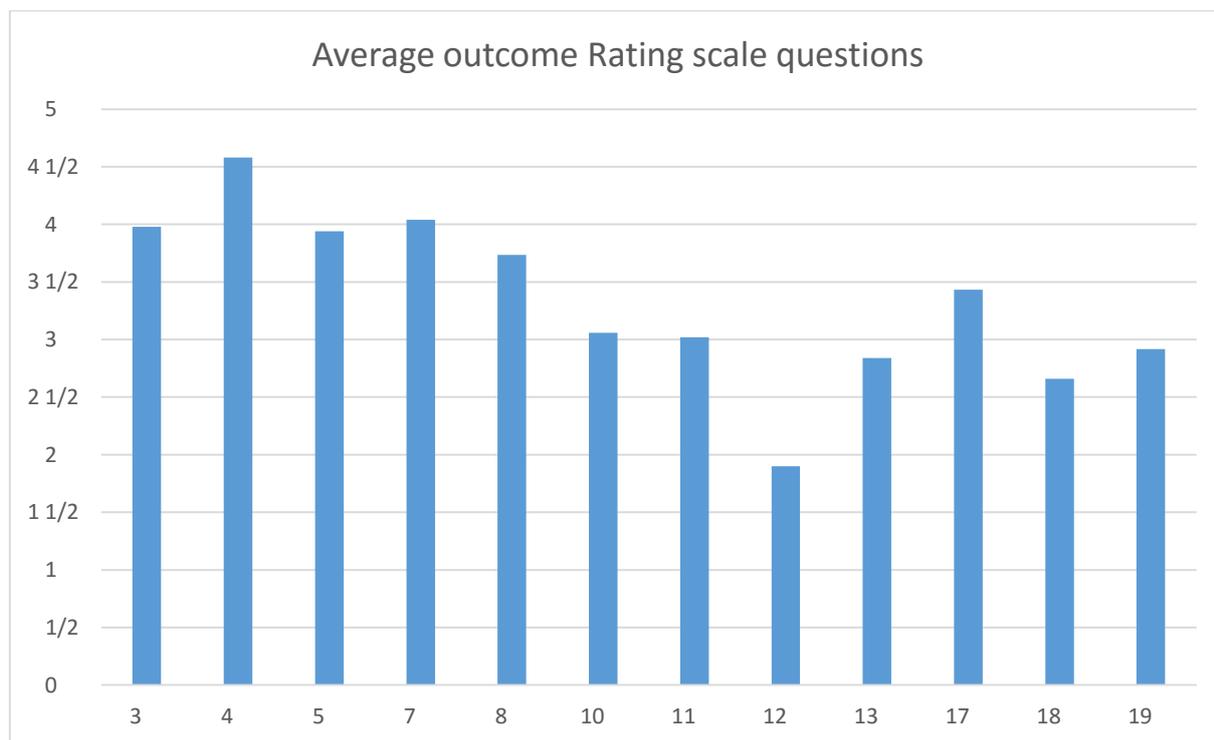
Question 14 and 20 are missing from the results as these are open questions. On the next page all the comments/ answers on the open questions can be found

Open answers/comments

# of questionnaire	Comment question 9	Question 14	Question 20
1	More explanation and interest		
7	Because I started to doubt about vaccinations, especially with my last 2 children. Internet doesn't offer clear unbiased information.	I cannot say whether the information is complete. The GGD barely provides information about the disadvantages while they according to me do exist.	For me everything is very unclear. I would like it if the GGD would respond more to the many stories. I for instance have no idea whether there have

			been good research about the side-effects of vaccinations. More specific in the long-term effects and disabilities. It seems that the GGD only provides information which helps towards people getting vaccinations.
13	The internet for more information		
15	It is good to form an opinion by yourself. All parties are coloured, the opposition as well as proposition.		
16	About possible side-effects		
17	The disadvantages of vaccinations are according to me not clear enough	The advantages and disadvantages should be described more instead of only in some flyers.	I feel that the reasons for vaccinations should be spoken about clearly, even though parents don't asks explicit for this information. Also the reasons against vaccinations should be spoken about. I understand that the GGD wants parents to keep vaccinating, this doesn't mean however that information about the disadvantages should be neglected.
19	Through internet and conversations with other mother. In order to get a complete idea of the possible effects of vaccinations		
21	Experiences of others and side-effects	During the first consult a dialogue about vaccinations and the possibilities of an adapted vaccination schedule.	
24	Through Google/internet in order to get extra background information		
25	Internet, when there is news about vaccinations or if I want more specific information	Maybe a short explanation about the most recent developments, however I'm very content with the communication	
26	Internet and also other sources than GGD		
29	Side-effects of a vaccination through internet		
31	Internet		
34	Google, in order to learn about the components of vaccinations		
40	RIVM, NVKP		
42	Internet		

46	Especially on internet. In our family a nephew has complications which are possibly the result of vaccinations		
47	Internet, about the risks		
48	Vaccinvrij, NVKP, several news sources which come up through Google.	There is a lot of one-sided communication. Most of the doctors only do what they've been learned instead of expanding their perception. Vaccinations are the holy grail and we cannot doubt about them.	
49	NVKP – in order to gain more arguments from both sides (pro and against) RIVM for information about the different diseases and side-effects of vaccinations, I measure them up against each other to assess the necessity.		
50	Online doctors pages and scientific researches	Innovation and recent developments regarding vaccinations	



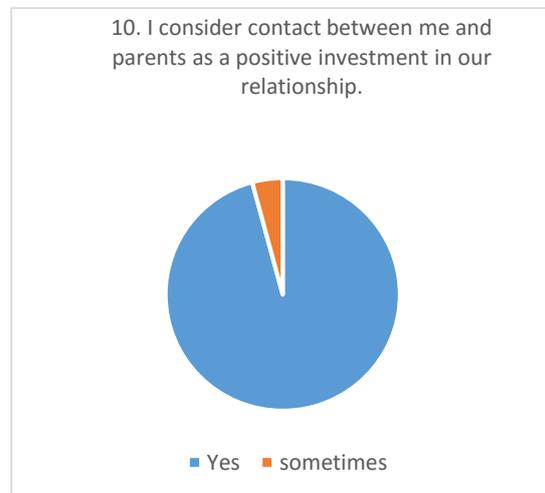
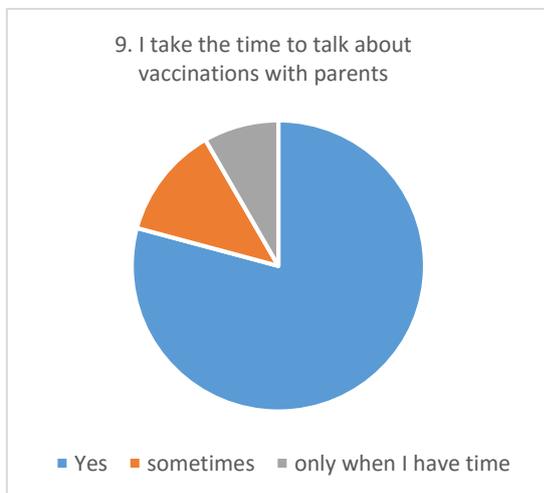
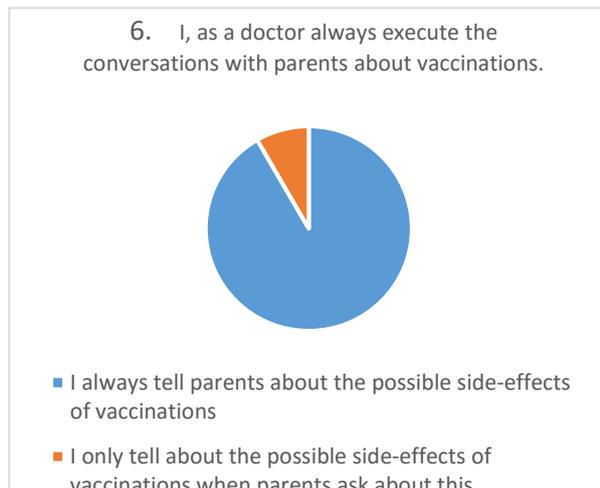
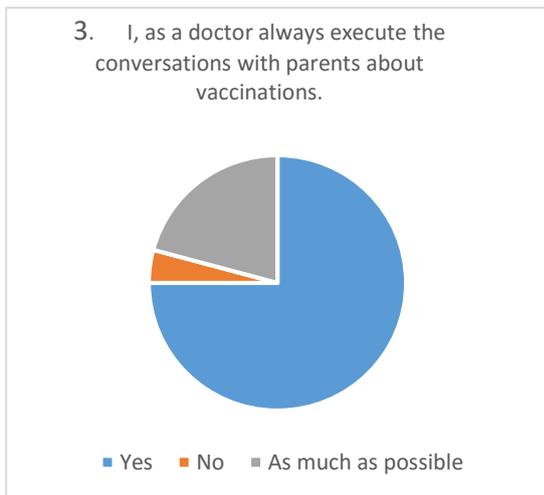
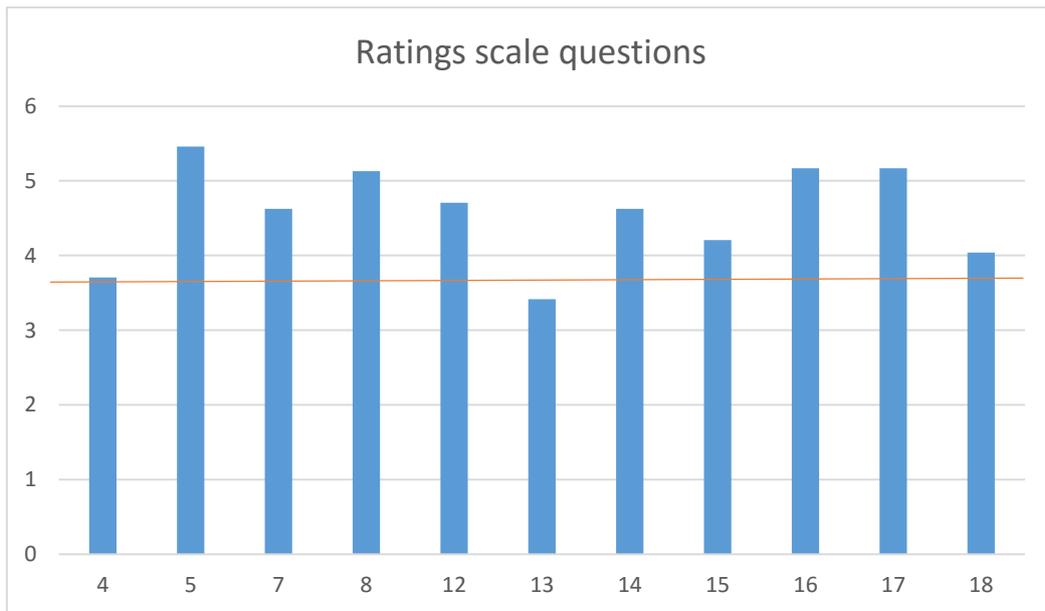
IV. Outcome questionnaire doctors

Questions	3	4	5	6	7	8	9	10
Average	1,875	3,708333	5,458333	1,083333	4,625	5,130435	1,5	1,083333
Standard error	0,336825	0,285388	0,103895	0,05763	0,29373	0,220531	0,208514	0,083333
Median	1	4	5	1	5	5	1	1
Mode	1	4	5	1	6	6	1	1
Standard deviation	1,650099	1,398109	0,508977	0,28233	1,438976	1,057628	1,021508	0,408248
Sample variance	2,722826	1,95471	0,259058	0,07971	2,070652	1,118577	1,043478	0,166667
Kurtosis	0,277013	-0,43066	-2,15566	9,123967	0,174775	1,818222	1,465503	24
skewness	1,483555	-0,36561	0,178611	3,21996	-0,89392	-1,29107	1,735403	4,898979
Range	4	5	1	1	5	4	3	2
Minimum	1	1	5	1	1	2	1	1
Maximum	5	6	6	2	6	6	4	3
Sum	45	89	131	26	111	118	36	26
Amount	24	24	24	24	24	23	24	24
Questions	11	12	13	14	15	16	17	18
Average	2,125	4,708333	3,416667	4,625	4,208333	5,166667	5,166667	4,041667
Standard error	0,219622	0,153216	0,22455	0,11753	0,170029	0,177203	0,143288	0,220992
Median	3	5	3	5	4	5	5	4
Mode	3	4	3	5	4	6	5	4
Standard deviation	1,075922	0,750604	1,100066	0,575779	0,832971	0,868115	0,701964	1,082636
Sample variance	1,157609	0,563406	1,210145	0,331522	0,693841	0,753623	0,492754	1,172101
Kurtosis	-1,87544	-0,95028	-0,40845	-0,68265	0,567441	-1,61789	2,908462	1,789446
skewness	-0,03927	0,553389	-0,09006	0,209656	-0,91842	-0,34638	-1,06653	-0,98571
Range	3	2	4	2	3	2	3	5
Minimum	1	4	1	4	2	4	3	1
Maximum	4	6	5	6	5	6	6	6
Sum	51	113	82	111	101	124	124	97
Amount	24	24	24	24	24	24	24	24

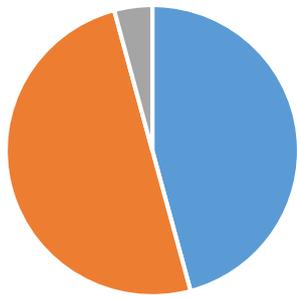
At question number 20 the doctors could leave additional comments. These were the comments made.

<p>Er zijn hypes zoals de Terumonaalden. Het is belangrijk met de ontstane onrust goed om te gaan. Steeds benadrukken dat je veilig wilt werken en serieus met mogelijke risico's omgaan ; ; Ik vind de "veilige naalden" erg imponerend - en tevens niet prettig - zou echt liever bij de kleine - niet zo bedreigend overkomende naalden - blijven! Het geeft zo'n nadruk op onveiligheid. Vraag me eerlijk gezegd sterk af of de veiligheid t.a.v. prikaccidenten er wel echt mee verbeterd wordt. ; Misschien een idee bij vaccinatie van risico-groepen...maar m.i. niet bij vaccinatie gemiddelde baby en peuters. ; ; Ik vind de vragen soms nogal voor velerlei</p>	<p>There are hypes like the terumoneedles. It is important to handle the occurring anxiety well. By emphasizing all the time that you want to work safe and cope seriously with possible risks. I consider the "safe needles" as very impressive and moreover not very nice – I would much rather keep the smaller – not as threatening needles. It emphasizes so much the unsafety. And honestly I strongly question whether the safety of vaccinations is improved with this. Maybe an idea for vaccinations of risk groups, but in my opinion not for average babies and toddlers. For the questionnaire I think some questions can be explained in different ways. Example the question about</p>
---	---

<p>uitleg vatbaar en dus moeilijk te beantwoorden. Bv de 5 na laatste vraag baby met kinkhoest... bezorgder voor wat? Wel prikken, niet prikken....?; ; De VTKP is weer goed op stoom. Een paar gevallen van Polio en Tetanus en flink wat publiciteit daarover zouden de vaccinaties populairder maken.; De Mex. griepvrij heeft de bereidheid voor het vaccineren geen goed gedaan. (Slaapziekte-berichten); Er is een toenemend wantrouwen m.b.t. vaccinaties en dat is niet helemaal ten onrechte naar mijn mening , het blijft tenslotte een vreemde ingreep; Maar voor de meeste vaccinaties geldt voor mij zeker: ik zou mijn eigen kind laten vaccineren - om ze te beschermen tegen erger.</p>	<p>the baby with whooping cough, more concerned for what? Vaccinating or not vaccinating? The DTKP is spreading and a few cases of polio and tetanus will increase the popularity of the vaccinations. However the Mexican flu vaccination hasn't promoted vaccinations (sleeping disease messages). There is an increasing distrust towards vaccinations, and this is not all dishonest in my opinion, as it remains a strange intervention. But for most vaccinations I would definitely vaccinate my own child, to protect them from worse.</p>
<p>Het internet is een bron van veel onzekerheid bij de ouders. "Ik heb me heel goed ingelezen" is een vaak gehoorde quote. Dat het inlezen aan onze kant nog beter dan goed is vermeld ik al jaren niet meer. "De ziektes waartegen gevaccineerd wordt komen hier niet meer voor", ook zo'n zin waar verder niet aan te tornen valt. Op consultatiebureaus waar een langdurige vaste bezetting is met dezelfde medewerkers lijkt het niet willen vaccineren minder te zijn. Tenminste dat is mijn indruk. Ik pleit voor een continue vertoning van filmpjes in de uitkleedruimte met kinderen die lijden aan de te voorkomen ziektes. (Utopie, zou ook ten koste gaan van de goede sfeer op de cb's.)</p>	<p>The internet is a source of a lot of insecurity amongst most of the parents. "I've did a lot of research about this" is a frequently heard quote. That the research from our side is much better and extensive is something I don't tell parents for years anymore. The diseases for which we vaccinate don't exist anymore, is also a sentence where I says something back at. In the health centres, where a long-term permanent coverage is with the same employees the not vaccinators seem to be less. At least that is my impression. I argue for a continuous demonstration of movies in the dressing room with children who suffer of the infection diseases. (Utopia, would harm the good ambiance in the health centres)</p>
<p>Ik weet zo niet exact welke brief naar ouders gaat. ; De folder die wordt verstuurd bevat volgens mij geen geruststellende teksten zoals dat we al meer dan 50 jaar vaccineren en dat het veilig is gebleken uit meerdere onderzoeken. Ook staat er niet een stukje in over misvattingen die we dan kunnen weerleggen. Ik weet ook niet of het handig is om dat er in te zetten, maar als ouder ga je dan toch googelen en dan kom je al die misvattingen wel tegen.</p>	<p>I don't know exactly which letter is sent to the parents; The flyer which is send out doesn't give (at least this is what I think) reassuring texts like: that we vaccinate for over 50 years and that the safety of vaccinations is demonstrated by multiple researches. Moreover there is no part of information with the misconceptions which we can rebut. I don't know if it is a good idea to put this in, but as a parent you often turn to google, where you will encounter these misconceptions anyways.</p>
<p>Ik doe altijd mijn best om zoveel mogelijk en open mogelijk in het gesprek te gaan.; Het werk van een CB-arts omvat echter meer dan alleen vaccinaties, en door tijdsdruk worden er wel eens onderdelen vergeten.; ; * Het zou mooi zijn, als we al in een eerder stadium in gesprek kunnen met de ouder: bijvoorbeeld nog tijdens de zwangerschap, omdat de mening dan 3 soms nog om te buigen is.; ; * Ik probeer altijd met respect om te gaan met een afwijkende mening. Sommige ouders zijn soms echter zo vooringenomen en ver van de realiteit, dat ik het soms wel erg moeilijk vind.; ; * ik merk wel, dat ik met toegenomen kennis over vaccineren wel beter kan adviseren. De algemeenheden in de folders zijn vaak te simpel en niet aansluitend aan het kennisniveau van kritische ouders. Dat zou beter kunnen.</p>	<p>I always try as much as possible to have an open conversation with parents. However the work of a health centre doctor is more than only vaccinations, and due to time pressure, sometimes tasks are forgotten. It would be nice if we could speak about vaccinations in an earlier stage with the parents, for instance during the pregnancy, because sometimes then it is easier to influence their opinion. I always try to cope with respect with parents who have another standpoints. However some parents are beforehand so coloured and far from the reality that I think this is hard sometimes. I do notice that I with improved knowledge about vaccinations can advise better. The generalities in the flyers are often too easy and are not aligned with the knowledge of critical parents. This can be improved.</p>



11. Parents understand my use of language



■ Yes ■ I think they do ■ I don't know

V. Content on the website of GGD Groningen

What	Brochure
Name	Pijn bij vaccinaties verlichten: wat u als ouder kunt doen
Where	http://ggd.groningen.nl/jeugd-opvoeding/informatie-en-opvoedings-folders/Pijnbijvaccinatiesverlichten.pdf
From	Centrum voor Jeugd en Gezin + GGD Groningen
Summary	It gives a clear and well-structured overview of how parents can soothe the pain during vaccinations. Before, during as well as after the vaccination
High perceived credibility	Yes
2 way communication dialogue	No, but it encourages you to contact them for more information and all their contact information is listed. Therefore a two way communication dialogue is easily accessible.
Accessible language	Highly accessible language
Pro-active stance	Yes, it informs parents pro-actively on how parents can soothe their children, while not specifically have asked for this.
Good visible	No, the brochure can be found on the GGD Groningen site, however not easy. One can go to the GGD site, then to brochures and in a list of a variety of topics this brochure can be found.
Highly transparent	Yes, the topic is in different ways approached and answers questions parents might get instantly. It does not raise any further questions.

GGD 1: Brochure

What	Website – home page on vaccinations
Name	Vaccinaties voor kinderen
Where	http://ggd.groningen.nl/infectieziekten-hygiene/vaccinaties-voor-kinderen
Summary	Short overview and information provided by GGD Groningen on why we vaccinate, how many people vaccinate their children and at what age the vaccinations take place, including an imagery of the vaccination schedule.
High perceived credibility	Yes
2 way communication dialogue	No, but it encourages you to contact them for more information and all their contact information is listed. Therefore a two way communication dialogue is easily accessible.
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, on the website a shortcut is created to this page with clear indication it will lead to the page about child vaccinations. Also when googling on: kinder vaccinaties Groningen (child vaccinations Groningen) This page is the first hit.
Highly transparent	Medium, as it is a very short text, not all parts of vaccinations are treated. However it does link to the website of the Rijksvaccinatie Programma for more information.

GGD 2: Vaccinations for children

What	Sub-web page of GGD 2: Vaccinations for children
Name	BMR- en DTP-vaccinaties voor kinderen van 9 jaar
Where	http://ggd.groningen.nl/infectieziekten-hygiene/vaccinaties-voor-kinderen/bmr-en-dtp-vaccinaties-voor-kinderen-van-9-jaar
Summary	Short page with information on the DTP and BMR vaccinations
High perceived credibility	Yes
2 way communication dialogue	No, but it encourages you to contact them for more information and all their contact information is listed. Therefore a two way communication dialogue is easily accessible.
Accessible language	Highly accessible language
Pro-active stance	Yes, it informs parents pro-actively by for instancing informing the parents on what they should do when their child missed a vaccination round.
Good visible	Yes, it is in a menu under the main web page of vaccinations and by googling on kinder vaccinaties Groningen (child vaccinations Groningen) this page is the second hit on Google.
Highly transparent	Medium, the page also contains a link to the frequently asked questions (FAQ's) on these vaccinations however it does not give information about the vaccinations themselves but more about the process, which might raise more questions and results in parents seeking for more information from other sources.

GGD 3: BMR and DTP

What	Link in the web-page GGD page 3
Name	Veelgestelde vragen over de vaccinaties voor 9-jarigen
Where	http://ggd.groningen.nl/infectieziekten-hygiene/vaccinaties-voor-kinderen/bmr-en-dtp-vaccinaties-voor-kinderen-van-9-jaar/veelgestelde-vragen-bmr-dtp
Summary	Frequently asked questions are answered about the vaccinations given to nine year old children.
High perceived credibility	Yes
2 way communication dialogue	No, but it encourages you to contact them for more information and all their contact information is listed. Therefore a two way communication dialogue is easily accessible.
Accessible language	Highly accessible language
Pro-active stance	Yes, it informs parents pro-actively and answers many questions, wherefore parents don't necessarily have to look for information elsewhere.
Good visible	Medium, it is only a link in the previous page.
Highly transparent	Yes, the matter is approached by means of different perspectives and does not raise many questions.

GGD 4: FAQ's

VI. Content on the website of Rijksvaccinatieprogramma

The vaccinations are part of a national program which is arranged and subsidized by the government. Therefore on the web page of GGD Groningen there is multiple times linked to the information sites of the government. The GGD Groningen links to these pages in order to provide parents with more information. Therefore the website of the Rijksvaccinatieprogramma is also analysed. It is important to note that the analysis of every page of the website is reflected here in their heading. For instance the heading diseases contains different pages on the diseases, the analysis of all pages under this heading are put in one table.

What	Home page website of Rijksvaccinatieprogramma
Name	Rijksvaccinatie programma
Where	http://rijksvaccinatieprogramma.nl/
Summary	The page has a news feed, the vaccination schedule with all the abbreviations of vaccinations and a shortcut to the information leaflet.
High perceived credibility	Yes
2 way communication dialogue	No
Accessible language	Highly accessible language
Pro-active stance	Yes, it gives straight away important information to parents however especially the newsfeed on this page contributed to a pro-active stance of this page and shows that the RVP is up-to-date on all the developments concerning vaccinations.
Good visible	Yes
Highly transparent	Not applicable

RVP 1: Home page

What	Web page- heading: the vaccinations
Name	De vaccinaties
Where	http://rijksvaccinatieprogramma.nl/De_vaccinaties
Summary	It gives general information about the vaccinations and for what diseases they serve. It describes the disease shortly but clear, and if the parent would like to attain more information, it links to pages with more information on the diseases. Moreover there is elaborated on when a vaccination is repeated, why it is repeated and why some vaccinations are given at such a young age.
High perceived credibility	Yes
2 way communication dialogue	No
Accessible language	Highly accessible language
Pro-active stance	Yes,
Good visible	Yes
Highly transparent	Yes, it is a short but clear description of the vaccinations and the diseases they prevent. It does not describe all aspects as e.g. the side effects, however these are described under the heading side-effects and therefore easy to find on the website.

RVP 2: Vaccinations

What	Web page- heading: the diseases
Name	De Ziekten
Where	http://rijksvaccinatieprogramma.nl/De_ziekten
Summary	It elaborates on then different diseases, gives percentages about the diseases and when the vaccinations were implemented. Moreover it also links to a short movie about the importance of vaccinations and the danger of these diseases. When vaccinations are recently added they explain why.
High perceived credibility	Yes
2 way communication dialogue	No
Accessible language	Highly accessible language
Pro-active stance	Yes, for instance at the page of the whooping-cough, there are links for more information. For instance a vaccination for this for pregnant women, the communicator is aware of the recent developments.
Good visible	Yes
Highly transparent	Yes

RVP 3: Diseases

What	Web page- heading: Side effects
Name	Bijwerkingen
Where	http://rijksvaccinatieprogramma.nl/Bijwerkingen
Summary	It describes the possible side-effects per vaccination. Also it urges that when your child gets very ill after the vaccination, the parent should warn the GGD/Lareb. Top 5 of side-effects described (harmless side effects). It explains the parents clearly when they should contact a doctor or give through a side-effect. It informs the parents how they can help their child with the side-effects. And at last all information leaflets of the vaccinations are available.
High perceived credibility	Yes
2 way communication dialogue	No, but the noting of serious side-effects or illnesses after the vaccination are highly encouraged. All contact information is provided.
Accessible language	Yes, highly accessible language.
Pro-active stance	Yes
Good visible	Yes
Highly transparent	Yes, it gives references of where the information gathered and it focuses on different sides of the vaccinations.

RVP 4: Side-effects

What	Web page- heading: Frequently asked questions
Name	Veelgestelde vragen
Where	http://rijksvaccinatieprogramma.nl/Veelgestelde_vragen
Summary	Frequently asked questions are answered. Immediately noted is that many of the questions deal with the arguments used by anti-vaccinators which could spread doubt and commotion among parents. The questions are answered clearly and don't leave space for any other interpretation. With two short videos they also explain how vaccinations function. Different rumours about negative effects of vaccinations are strongly rebutted.
High perceived credibility	Yes
2 way communication dialogue	They encourage parents to contact them when their questions are not answered. All contact information is provided and therefore a two way communication dialogue is easily accessible.
Accessible language	The language is accessible, however due to the complexity of some topics, parts are difficult to understand. This is especially when it comes to the more technical aspect of the vaccines.
Pro-active stance	Yes, it answers many relevant and recent questions on vaccinations
Good visible	Yes
Highly transparent	Yes, all references are mentioned and the questions are questions from many perspectives and are overall complete answered. Moreover when a parent prefers more information links are mentioned.

RVP 5: Frequently asked questions

What	Web page- heading: About the programme
Name	Over het programma
Where	http://rijksvaccinatieprogramma.nl/Over_Rijksvaccinatieprogramma
Summary	Informs the parents about the general information of the Rijksvaccinatieprogramma. It gives information about the invitation process and the vaccination certificate. And which institutes are all involved and which institute is responsible for what. When you don't want to vaccinate it gives some information but not much. Moreover it seems as if there are only two chances for you to reconsider the decision to not vaccinate but obviously this is not true. Furthermore a short timeline is available and the newsfeed.
High perceived credibility	Yes
2 way communication dialogue	No
Accessible language	Highly accessible language
Pro-active stance	Medium, it does not provide enough information e.g. on what to do when you don't want to vaccinate and the risks of this.
Good visible	Yes
Highly transparent	Medium, it raises more questions and not all aspects are involved.

RVP 6: about the programme

What	Web page- heading: contact
Name	Contact
Where	http://rijksvaccinatieprogramma.nl/Contact
Summary	Gives an overview of all the registration dates for vaccinations per province. The E-mail address and Phone number of the contacts per region.
High perceived credibility	Yes
2 way communication dialogue	No, but it encourages you to contact them for more information and all their contact information is listed. Therefore a two way communication dialogue is easily accessible.
Accessible language	highly accessible language
Pro-active stance	Yes
Good visible	Yes
Highly transparent	Not applicable

RVP 7: Contact

VII. Content on the website of the RIVM

What	Movie
Name	Wat is het Rijksvaccinatie Programma?
Where	http://www.rivm.nl/Documenten_en_publicaties/Algemeen_Actueel/Multimedia/Infectieziekten/Rijksvaccinatieprogramma/Wat_is_het_Rijksvaccinatieprogramma/Download/Wat_is_het_Rijksvaccinatieprogramma
Summary	In this short movie they explain what the Rijksvaccinatieprogramma is exactly. Like when it was introduced and for which diseases children get vaccinations. Three diseases are elaborated further on: polio, measles and meningococcus C. They explain that the programme is under research continuously and can be updated if necessary.
High perceived credibility	Yes
2 way communication dialogue	No, it is a short movie
Accessible language	Highly accessible language, duration is 3.44 minutes, which makes it easy to watch
Pro-active stance	Yes, by answering where people might have questions about. E.g. people ask us, why do you still vaccinate for measles? In the old days everybody had measles. In this movie they explain pro-actively that it is true that many people had the measles however it was a terrible disease and now it is disappeared.
Good visible	No, this movie stands on the home page of the RIVM under the heading movies, however not on the websites of GGD or Rijksvaccinatieprogramma.
Highly transparent	Yes

RIVM 1: movie 1

What	Movie
Name	De inenting van het Rijksvaccinatie programma
Where	http://www.rivm.nl/Documenten_en_publicaties/Algemeen_Actueel/Multimedia/Infectieziekten/Rijksvaccinatieprogramma/De_inenting_van_het_Rijksvaccinatieprogramma/Download/De_inenting_van_het_Rijksvaccinatieprogramma
Summary	In this short movie they explain about the vaccinations. First when the parent can expect an invitation and what can be found in this invitation. Why a child gets vaccination after 2 months. A mother explains how her children experienced the vaccinations and how they reacted. A bit of information about the side effect and finally the vaccination schedule.
High perceived credibility	Yes
2 way communication dialogue	No, it is a short movie
Accessible language	Highly accessible language, duration is 3.04 minutes, which makes it easy to watch
Pro-active stance	No
Good visible	No, this movie stands on the home page of the RIVM under the heading movies, however not on the websites of GGD or Rijksvaccinatieprogramma.
Highly transparent	Yes

RIVM 2: movie 2

What	Movie
Name	Om welke ziekten gaat het rijksvaccinatieprogramma?
Where	http://www.rivm.nl/Documenten_en_publicaties/Algemeen_Actueel/Multimedia/Infectieziekten/Rijksvaccinatieprogramma/Om_welke_ziekten_gaat_het_Rijksvaccinatieprogramma/Download/Om_welke_ziekten_gaat_het_Rijksvaccinatieprogramma
Summary	Does not treat every disease separately but talks about them in general. Many of the diseases can lead to death, handicaps or a shortened life expectation. Explains that nowadays we don't see polio anymore, however, would we stop vaccinating the disease will return in a view years. All vaccinations stay up to date and it is important to keep vaccinating.
High perceived credibility	Yes
2 way communication dialogue	No, it is a short movie
Accessible language	Highly accessible language, duration is 3.03 minutes, which makes it easy to watch
Pro-active stance	No

Good visible	No
Highly transparent	Medium, it is a nice introduction movie, however not everything is said and the movie raises questions.

RIVM 3: movie 3

What	Movie
Name	Veiligheid van vaccinaties in Rijksvaccinatieprogramma
Where	http://www.rivm.nl/Documenten_en_publicaties/Algemeen_Actueel/Multimedia/Infectieziekten/Rijksvaccinatieprogramma/Veiligheid_van_vaccinaties_in_het_Rijksvaccinatieprogramma/Download/Veiligheid_van_vaccinaties_Rijks_vaccinatieprogramma
Summary	Answering frequently asked questions, asked by parents (1 parent is also in another movie). Do I have to keep vaccinating? How does a vaccine works? How is the safety guaranteed? Can I also not vaccinate my child? What are the side effects?
High perceived credibility	Yes
2 way communication dialogue	No
Accessible language	Highly accessible language, duration is 3.45 minutes, which makes it easy to watch
Pro-active stance	Yes
Good visible	No
Highly transparent	No

RIVM 4: movie 4

What	Movie
Name	Wat is groepsimmunitet?
Where	http://www.rivm.nl/Onderwerpen/R/Rijksvaccinatieprogramma/Media/Wat_is_groepsimmunitet/Film_Wat_is_groepsimmunitet
Summary	They explain what herd immunity is. How more in a group, how better the group is protected as a whole. By herd immunity we can protect people who cannot be vaccinated like for instance baby.
High perceived credibility	Yes
2 way communication dialogue	No
Accessible language	Highly accessible language, duration is 1 minute, which makes it easy to watch
Pro-active stance	Yes, however this is the first time that herd immunity is even mentioned, therefore it might be too pro-active, as no additional information is available.
Good visible	No
Highly transparent	Yes

RIVM 5: movie 5

What	Brochure
Name	Vaccinaties voor kinderen van 4 jaar
Where	http://www.rivm.nl/Documenten_en_publicaties/Algemeen_Actueel/Brochures/Infectieziekten/Rijksvaccinatieprogramma/Vaccinaties_voor_kinderen_van_4_jaar?sp=Y3RsMT1oYW5kb3V0O3F1ZXJ5PSgxNTY3NTQpO0IOTEICUkFSWT10cnVIO1NJVEVMQU5HVUFHRT1ubDtzZWYy2hiYXNlPTA7c2VhcmNocmFuZ2U9NTA7c2VhcmNoZXhwcmVzc2lvcj0oY3RsMSkgQU5EIEIOTEICUkFSWSBBTkQgU0lURUxBTkdVQUdFO3NvcnRmaWVsZD1wdWJsaXNoZGF0ZTtzb3J0cmV2ZXJzZWQ9dHJ1ZTs=&query=&pagenr=1&result=rivmp%3A52653
Summary	It explains why we vaccinate and about the safety of vaccinations. Against what diseases DKTP (diphtheria, whooping cough, tetanus, polio) we vaccinate when a child is four year old with a very short description of every disease. The process of the vaccinations and some side-effects. + the vaccination schedule
High perceived credibility	Yes
2 way communication dialogue	No, although in case of any questions it encourages to contact a doctor or the consultation agency.
Accessible language	Highly accessible language, however some words make the text a bit vague in comparison to other information provided.
Pro-active stance	Yes, the brochure is also up to date. (From 2015)
Good visible	Yes
Highly transparent	No, it does not seem to inform about all important aspects.

RIVM 6: Brochure 1

What	Brochure
Name	Vaccinaties voor peuters van 14 maanden
Where	http://www.rivm.nl/dsresource?objectid=rivmp:52652&type=org&disposition=inline&ns_nc=1
Summary	This brochure has the same structure as brochure 1. Only the focus here is on the other disease namely: BMR (goitre, Measles and rubella) and meningococcus C
High perceived credibility	Yes
2 way communication dialogue	No, although in case of any questions it encourages to contact a doctor or the consultation agency
Accessible language	Highly accessible language
Pro-active stance	Yes, the brochure is also up to date. (From 2015)
Good visible	Yes
Highly transparent	No, it does not seem to inform about all important aspects.

RIVM 7: Brochure

What	Brochure
Name	Vaccinaties voor baby's van 6-9 weken, 3,4 en 10,11 maanden
Where	http://www.rivm.nl/dsresource?objectid=rivmp:52644&type=org&disposition=inline&ns_nc=1
Summary	Same structure as brochure 1 and 2. With similar information only adapted for the vaccinations for DKTP (diphtheria, whooping cough, tetanus and polio), Hib disease, hep-B (hepatitis B) Pneu (pneumococcal)
High perceived credibility	Yes
2 way communication dialogue	No, although in case of any questions it encourages to contact a doctor or the consultation agency
Accessible language	Highly accessible language
Pro-active stance	Medium, they don't inform parents specifically about the young age of vaccinations, something which concerns parents in general.
Good visible	Yes
Highly transparent	No, it does not inform about all aspects

RIVM 8: Brochure 3

What	Brochure
Name	Vaccinaties voor kinderen van 9 jaar
Where	http://www.rivm.nl/dsresource?objectid=rivmp:180590&type=org&disposition=inline&ns_nc=1
Summary	Same structure as brochure 1, 2 and 3. With similar information only adapted for the vaccinations for DTP (diphtheria, tetanus, polio) and BMR (goitre, measles and rubella)
High perceived credibility	Yes
2 way communication dialogue	No, although in case of any questions it encourages to contact a doctor or the consultation agency
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes
Highly transparent	No, it does not inform about all aspects

RIVM 9: Brochure 4

What	Brochure
Name	Bescherm uw kind tegen 12 infectieziekten
Where	http://www.rivm.nl/dsresource?objectid=rivmp:51254&type=org&disposition=inline&ns_nc=1
Summary	The brochure has generally the same structure and information as brochure 1-4, only all disease are shortly described here.
High perceived credibility	Yes
2 way communication dialogue	No, although in case of any questions it encourages to contact a doctor or the consultation agency
Accessible language	Highly accessible language, moreover this brochure is provided in multiple languages. (Arabic, Armenian, Korean, Chinese, English, French, Russian, Somali, Tigrinya, Uyghur)
Pro-active stance	Yes

Good visible	Yes
Highly transparent	No, not all information is provided.

RIVM 10: Brochure 5

What	Document
Name	Vaccinatiebewijs
Where	http://www.rivm.nl/dsresource?objectid=rivmp:266374&type=org&disposition=inline&ns_nc=1
Summary	It is the vaccination certificate which parents receive at home with the invitation, on which the doctors can keep track with all the vaccinations the child received.
High perceived credibility	Yes
2 way communication dialogue	No
Accessible language	Yes
Pro-active stance	Yes
Good visible	Yes
Highly transparent	Yes

RIVM 11: Vaccination certificate

What	Web page- Heading: Voor kinderen
Name	Voor kinderen
Where	http://www.rivm.nl/Onderwerpen/R/Rijksvaccinatieprogramma/Voor_kinderen
Summary	It is an information page for children, in order to inform them about vaccinations. It is the right of children to also decide whether they want to be vaccinated or not. However in practice the parents have the most influence of course. It explains about vaccinations, bacteria and viruses. The history of vaccinations, where the name vaccinations come from. And also extra material which children could use for school including images and graphs.
High perceived credibility	Yes
2 way communication dialogue	No
Accessible language	Highly accessible, it is explained in children language
Pro-active stance	Yes
Good visible	Yes
Highly transparent	Yes

RIVM 12: Children's page

What	Website
Name	Rijksvaccinatie programma
Where	http://www.rivm.nl/Onderwerpen/R/Rijksvaccinatieprogramma
Summary	The RIVM is responsible for the vaccination programme as the coordination, communication, research, professional support and the registration, sale, storage and distribution of vaccines. Therefore this is the main source where parents can acquire information. On this website a lot can be found like vaccinations in the media, the last researches, information leaflet of each vaccinations, the national numbers on vaccinations, the developments per year for the vaccination programme. Basically many documents and publications concerning vaccinations and the Netherlands can be found on this website.
High perceived credibility	Yes
2 way communication dialogue	No, when you would like to know more they redirect you to your own doctor or the GGD.
Accessible language	Medium, but this is also due to the fact that this first of all is a difficult topic for which, when going in deep, no easy words are available.
Pro-active stance	Yes, the communicator is very aware of what is going on in the world of vaccinations and posts a lot of newsfeed as well.
Good visible	Yes
Highly transparent	The site is very transparent, and also the information for professionals can be acquired by anyone.

RIVM 13: RVP

VIII. Analysis letters

What	Letters sent to parents
Name	Brieven voor oproep
Where	Retrieved by means of GGD doctor Paulien Voskuil
Summary	<p>Every time a child has reached the age for a new vaccination, the Rijksvaccinatieprogramma sends a letter with an invitation. Sometimes these also include a brochure about the specific vaccinations the child qualifies for. There are different letters:</p> <ul style="list-style-type: none"> - Vaccination certificate (including repetition letters) - Invitations for vaccinations - Repetition of the invitation - Last invitation - Invitation for those who indicated not want to take part.
High perceived credibility	Yes
2 way communication dialogue	No, but it encourages it by giving clear instructions what to do if you have more questions. Besides this it is rather personal as it is signed by someone.
Accessible language	Highly accessible language
Pro-active stance	Yes, it invites people
Good visible	Yes, they just receive it
Highly transparent	Yes, the sender is clear and they say clearly that the parent is not obliged to vaccinate their child.

Letters

IX. Facebook page of GGD Groningen

General information	
Link	https://www.facebook.com/ggdgroningen/?fref=ts
Likes	387 (at 19/04/2016)
Total amount of posts (period 18/10/2015- 18/4/2016)	63
Posts vaccination related	1

Topic	HPV vaccination
Date	30/03/2016)
Summary	It is an invitation for girls who are 13 year old for a vaccination for HPV. It is clearly mentioned where the girls can find when and where the vaccinations will be given. It includes also a link to the website of the GGD, where more information can be found about the vaccination.
Likes	4
Comments	0
High perceived credibility	Yes
2 way communication dialogue	Yes, people can respond to the post and moreover all contact information is provided
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	As the post only has four likes, and the page in general not so much, it is not very likely that this post had a high visibility.
Highly transparent	Yes

GGD Facebookpost 1

X. Twitter page of GGD Groningen and JGZ

General information	
Link	https://twitter.com/jgzgroningen
Followers	159 (at 19/04/2016)
Following	139 (at 19/04/2016)
Total amount of posts (period 18/10/2015- 18/4/2016)	383
Posts vaccination related	14

Topic	Children receive vaccinations against terrible infection diseases which were in the past an important cause of death amongst children.
Link	http://ggd.groningen.nl/infectieziekten-hygiene/vaccinaties-voor-kinderen (to the website of GGD about vaccinations)
Likes	0
Retweeted	0
Date	12/04/2016

GGD Groningen JGZ Tweet 1

Topic	The coming two weeks all 12 year old girls are offered a vaccination against HPV. Questions? A doctor will be present at the location.
Link	http://www.groterworden.nl/13-18-jaar/hpv-vaccinaties/ (to a movie about HPV vaccination and a site with more information)
Likes	0
Retweeted	0
Date	10/09/2016

GGD Groningen JGZ Tweet 2

Topic	Side effects after vaccinations? Tell it! By doing this you contribute to the safety of vaccinations.
Link	http://www.lareb.nl/ (website which registers all side-effects)
Likes	0
Retweeted	0
Date	09/09/2016

GGD Groningen JGZ Tweet 3

Topic	Doubting about the necessity of the HPV vaccination? Cervical cancer is one of the major causes of death amongst young women.
Link	http://www.gezondheidenco.nl/214251/de-jacht-op-hpv-hpv-prik-of-niet/ (article about the HPV vaccination)
Likes	0
Retweeted	3
Date	23/02/2016

GGD Groningen JGZ Tweet 4

Topic	From March 14-March 31, DTP and BMR vaccinations in province of Groningen. For the locations see the website.
Link	http://ggd.groningen.nl/infectieziekten-hygiene/vaccinaties-voor-kinderen/bmr-en-dtp-vaccinaties-voor-kinderen-van-9-jaar (about the BRM and DTP vaccinations)
Likes	0
Retweeted	1
Date	23/02/2016

GGD Groningen JGZ Tweet 5

Topic	Retweeted by GGD Groningen: For everyone who thinks child diseases are not terrible. This is what meningitis does to a child.
Link	http://www.bbc.com/news/uk-england-london-35602045 (an article about what meningitis recently did to a child)
Likes	1
Retweeted	6
Date	18/02/2016

GGD Groningen JGZ Tweet 6

Topic	Begin of April, HPV vaccinations in the province of Groningen. Girls who turn 13 this year will be invited.
Link	http://www.rivm.nl/Documenten_en_publicaties/Algemeen_Actueel/Veelgestelde_vragen/Infectieziekten/Rijksvaccinatieprogramma/Veelgestelde_vragen_ov_er_de HPV vaccinatie tegen baarmoederhalskanker (Page of the RIVM on HPV vaccination)
Likes	0
Retweeted	0

Date	16/02/2016
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GGD Groningen JGZ Tweet 7

Topic	Are Dutch people still good protected against infection diseases like, measles, tetanus, polio and whooping cough?
Link	https://twitter.com/rivm/status/69923228145029120 (link to RIVM)
Likes	0
Retweeted	0
Date	16/02/2016

GGD Groningen JGZ Tweet 8

Topic	Promotion research: Maarten van Wijhe: RVP played a big role in reducing child death.
Link	http://rivm.nl/Documenten_en_publicaties/Algemeen_Actueel/Nieuwsberichten/2016/Historisch_onderzoek_naar_afname_van_sterfte_door_vaccinatie (article on RIVM site, about the research of Maarten van Wijhe)
Likes	0
Retweeted	5
Date	10/02/2016

GGD Groningen JGZ Tweet 9

Topic	One of these days all girls who turn 13 this year, will receive an invitation for HPV vaccinations
Link	0
Likes	1
Retweeted	1
Date	08/02/2016

GGD Groningen JGZ Tweet 10

Topic	The younger your child, the more your child suffers of the whooping cough.
Link	https://twitter.com/GezondNieuws/status/694484181271711744 (whooping coughs' prevalence increases)
Likes	0
Retweeted	2
Date	02/02/2016

GGD Groningen JGZ Tweet 11

Topic	The newest movie on groterworden.nl is about the vaccinations for nine year olds BMR and DTP. This is how you can prepare your child.
Link	0
Likes	1
Retweeted	8
Date	04/12/2015

GGD Groningen JGZ Tweet 12

Topic	Whooping cough can have terrible consequences.
Link	https://twitter.com/RTLnieuws/status/672086736349093888 (about a child which passed away of the whooping cough)
Likes	0
Retweeted	0
Date	02/12/2015

GGD Groningen JGZ Tweet 13

Topic	Epilepsy after vaccination. Research: not vaccinations are the cause but an underlying congenital condition
Link	https://twitter.com/jeugdgezondheid/status/664385092689764352 (against a link between epilepsy and vaccinations)
Likes	0
Retweeted	0
Date	11/11/2015

GGD Groningen JGZ Tweet 14

XI. Content on the website of NVKP

Nederlandse Vereniging Kritisch Prikken (Dutch association critical vaccinations)

What	Homepage of website NVKP
Name	Home
Where	http://nvkp.nl/
Summary	The homepage gives a short overview of all the information which is available at the webpage. As the FAQ's (and their answers to the questions formulated by the RIVM), information line, illnesses and vaccinations, the web-shop, lectures, information on how to become a member and a news feed.
High perceived credibility	Semi, at first sight it all looks very professional and trustworthy. However if a person would look further into the website it becomes clear that there is a lot of ambiguity amongst where the paid contributions go to. However for people who do not look far into it, it looks like a credible website. Also due to the fact that you can always contact them and buy books, go to readings etc.
2 way communication dialogue	No, but it encourages you to contact them for more information and all their contact information is listed and also other methods to communicate closely with the organization. Therefore a two way communication dialogue is easily accessible.
Accessible language	Highly accessible language
Pro-active stance	Yes, it is pro-active in many different ways, for instance with the contact information and the lectures offered at the website. But also by linking to a page which rebuts a lot of information the RIVM provides on its website directly.
Good visible	Yes, also by SEO, when googling vaccination related terms, the NVKP is often the first page to show up.
Highly transparent	Yes, how it appears.

NVKP 1: Home

What	Webpage
Name	Information
Where	http://nvkp.nl/informatie/
Summary	It gives a short overview of many information available at the website, which will be analysed in the following tables. The headings are: about NVKP, illnesses and vaccinations, disadvantages vaccinations, flue vaccination, experiences, short movies, news, literature, vacancies.
High perceived credibility	No, at first sight it all looks very professional and trustworthy. However if a person would look further into the website it becomes clear that there is a lot of ambiguity amongst where the paid contributions go to. However for people who do not look far into it, it looks like a credible website. Also due to the fact that you can always contact them and buy books, go to readings etc.
2 way communication dialogue	No
Accessible language	Highly accessible language
Pro-active stance	No, it is only a short information page.
Good visible	Yes
Highly transparent	Yes, how it appears.

NVKP 2: information

What	Sub web page of information
Name	About NVKP
Where	http://nvkp.nl/informatie/over-nvkp/
Summary	It gives all the contact information of the NVKP, the roles within the NVKP, its mission, vision and means, its relations abroad, its legal status.
High perceived credibility	No, at first sight it all looks very professional and trustworthy. However if a person would look further into the website it becomes clear that there is a lot of ambiguity amongst where the paid contributions go to. However for people who do not look far into it, it looks like a credible website.
2 way communication dialogue	No, but it encourages you to contact them for more information and all their contact information is listed, therefore a two-way communication dialogue is easily accessible.

Accessible language	Semi accessible language, some sentences are written in a weird way or with unnecessary long words, which make the text a bit difficult to read, however this is not necessary.
Pro-active stance	Yes, it is pro-active in many different ways, for instance with the contact information and what it exactly wants to do.
Good visible	Yes, also by SEO, when googling vaccination related terms, the NVKP is often the first page to show up.
Highly transparent	Yes, all information about the association is available. For instance all contact information including the address. All the functions within the association, the minutes, money spend etc.

NVKP 2: information – about NVKP

What	Sub web page of information
Name	Illnesses and vaccinations
Where	http://nvkp.nl/informatie/ziekten-en-vaccins/
Summary	It has seven main points: introduction, the Trojan horse, unknown side effects, choice of parents, pay attention, questions and information leaflets of all the vaccinations against illnesses. The text is accusative and condescending especially towards the pharmaceutical industry and does not provide objective information. Also the text directly links vaccinations to autism and ADHD.
High perceived credibility	No, due to the fact that the text is not objective and is written in a very strong way, it loses its credibility, however for people who might be prejudiced already this might not be the same way.
2 way communication dialogue	No, but it encourages you to contact them for more information if you want to know more or to visit one of the practitioners in your area.
Accessible language	Highly accessible language, although very strong. The choice of words is very strong like: <i>“horribly suffering and death”</i> but also trying to lower the seriousness of polio by stating that <i>“we remember polio as the disease of paralysis, however paralysis only appeared in less than 5% of the cases”</i> .
Pro-active stance	Yes, it is pro-active in many different ways, for instance with the contact information and also answering some questions parents might get straight away from reading the text.
Good visible	Yes, also by SEO, when googling vaccination related terms, the NVKP is often the first page to show up.
Highly transparent	No, it does only focus on their standpoint and does not provide any objective information.

NVKP 3: information – illnesses and vaccinations

At the webpage NVKP 3: information – illnesses and vaccinations, one can go straight to information leaflets of every disease, on this page feedback is given on the information leaflet by the NVKP and the full information leaflet can be downloaded. As the pages of the diseases are generally similar, as an example the page of the measles will be used in order to give insight in how the NVKP deals with this. <http://nvkp.nl/informatie/ziekten-en-vaccins/mazelen/>

What	Sub web page of NVKP3: information – illnesses and vaccinations
Name	Measles
Where	http://nvkp.nl/informatie/ziekten-en-vaccins/mazelen/
Summary	An overview of the history of the measles and the vaccination against the measles. It does not provide any information on what the measles actually for effect have on people, only that getting immune naturally is better. Moreover it states that vaccinated people only have a limited immune duration, this is partly true, but due to the fact that three vaccinations are given the immunity is lifelong. By stating that only <i>“27,5% of the vaccine people is still protected after eight years against the measles”</i> the association is lying. The page is mainly promoting to get the measles naturally and get immune by this way.
High perceived credibility	No, due to the fact that the text is not objective and is written in a very strong way, it loses its credibility, however for people who might be prejudiced already this text might be reinforcing their feelings.
2 way communication dialogue	No, it only provides information
Accessible language	Semi, the text is easy to read, however it is clear that a lot is translated from English which has resulted in the appearance of some strange “Dutch” words like: boostereren.
Pro-active stance	Yes, it answers many questions in the text.

Good visible	Yes, also by SEO, when googling vaccination related terms, the NVKP is often the first page to show up.
Highly transparent	No, it does only focus on their standpoint and does not provide any objective information, moreover it gives quotes, but it does not provide it sources, as the only source mentioned on the page is the information leaflet.

NVKP 4: information – illnesses and vaccinations – Measles

What	Sub web page of NVKP2: information
Name	Disadvantages of vaccinations
Where	http://nvkp.nl/informatie/artikelen/
Summary	The page gives a summary of disadvantages related to vaccinations and links to the articles, which elaborate more on this, whom are written by the NVKP itself. On the page short summaries or written and the articles itself are longer and give more information.
High perceived credibility	Yes, the text is not as strong as on the other pages and obviously every research can be rebutted by another.
2 way communication dialogue	No
Accessible language	Highly accessible language
Pro-active stance	No, it just gives short summaries of the articles
Good visible	Yes,
Highly transparent	No, it does not tell for instance about the article linking autism to vaccinations, that this research is withdrawn years ago. It is still presented as valid information.

NVKP 5: information – disadvantages of vaccinations

What	Sub web page of NVKP 2: information
Name	Stories from experience
Where	http://nvkp.nl/informatie/ervaringsverhalen/
Summary	The page gives an overview of all people who share their stories about what not vaccinating did for them, or the negative side effects when they did vaccinate their child.
High perceived credibility	Yes, because the stories are personal it seems more credible
2 way communication dialogue	Semi, it only tells that side-effects can be given to the Lareb, but also NVKP and vaccination free.
Accessible language	Yes
Pro-active stance	No
Good visible	Yes,
Highly transparent	No, it does not give any arguments against them as e.g. other reasons why a child got ill after vaccinating.

NVKP 6: information – illnesses and vaccinations

The page NVKP 7: information – illnesses and vaccinations counts 27 personal stories. Two stories will be analysed in order to give an impression of what it is about.

What	Sub web page of NVKP 6: information – stories from experience
Name	I wished I knew before
Where	http://nvkp.nl/informatie/ervaringsverhalen/ik-wou-dat-ik-het-eerder-had-geweten/
Summary	A mother tells the story of her son which got multiple times ill after being vaccinated with the DTP vaccination. She tells she is angry and sad that she never knew before about the negative side-effects of vaccinations and is happy this website exists.
High perceived credibility	No, the text is written in a strong way and is badly translated from another language. Also she tells about that her son got ill but does not really explains what he had. Moreover the story is from a mother coming from Jordanian. It is partly credible though, as the story is really linked to a person and her experience.
2 way communication dialogue	No
Accessible language	No, the use of language is rather strange, also medication is mentioned from which readers wouldn't know what it is.
Pro-active stance	No
Good visible	Semi, this story can be found on the list between all the stories.

Highly transparent	No, it is a too short story with too little information and a lot is left out.
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NVKP 7: information – illnesses and vaccinations – story

What	Sub web page of NVKP 2: information – illnesses and vaccinations
Name	Autism after BMR vaccination, Lareb denies connection.
Where	http://nvkp.nl/informatie/ervaringsverhalen/autistisch-na-bmr-vaccinatie-lareb-ontkent-verband/
Summary	The story of a woman who tells how her son got autism after a vaccination. He got first ill after the BMR and when he got better after two weeks he didn't speak anymore and didn't understand assignments. Now being two years, her son shows all the signs of autism.
High perceived credibility	No, the text is very short and gives very limited information. Only the fact that names are mentioned make the story more credible.
2 way communication dialogue	No
Accessible language	Highly accessible language, however the story is very short.
Pro-active stance	No
Good visible	Semi, this story can be found on the list between all the stories.
Highly transparent	No, it gives highly limited information

NVKP 8: information – illnesses and vaccinations – story

What	Sub web page of NVKP 2: information
Name	News feed
Where	http://nvkp.nl/informatie/nieuws/
Summary	A news feed with 193 articles. The news is mainly from researches and biased against vaccinations. But the news also comes from individuals who tell about their negative experiences or what the NVKP all does.
High perceived credibility	Yes, many professors are named
2 way communication dialogue	No, it only gives links to the news
Accessible language	Yes
Pro-active stance	No
Good visible	Yes, also by SEO, when googling vaccination related terms, the NVKP is often the first page to show up.
Highly transparent	It seems this way as many different researches etc. are listed.

NVKP 8: information – News feed

What	Sub web page of NVKP 2: information
Name	Literature
Where	http://nvkp.nl/informatie/literatuur/
Summary	It lists 7 books about vaccinations or the related illnesses
High perceived credibility	No, there is not a lot of information available.
2 way communication dialogue	No
Accessible language	Not applicable (only the titles and authors are written)
Pro-active stance	No (you cannot order them directly e.g.)
Good visible	Yes
Highly transparent	No

NVKP 9: information – literature

What	Sub web page of NVKP 2: information
Name	Vacancies
Where	http://nvkp.nl/informatie/vacatures/
Summary	Tells very short the mission of the NVKP and the available vacancies with description.
High perceived credibility	Not applicable
2 way communication dialogue	No, but highly encouraged to contact if you are interested
Accessible language	Highly accessible language.
Pro-active stance	No
Good visible	Yes
Highly transparent	Not applicable

NVKP 10: information – vacancies

What	Sub web page: parent meetings
Name	Parental meetings
Where	http://nvkp.nl/oudergroepen/
Summary	It tells what the parent meetings are and what they want to achieve. The goal is that peers can inform peers by means of objective information on vaccinations. Everybody can start a group or apply for a group.
High perceived credibility	Yes
2 way communication dialogue	No, but it is encouraged, obviously when you attend the parent meetings it is.
Accessible language	Highly accessible language
Pro-active stance	Semi
Good visible	Yes
Highly transparent	Yes

NVKP 11: Parent meetings

What	Sub web page: frequently asked questions
Name	Frequently Asked Questions
Where	http://nvkp.nl/veelgestelde-vragen/
Summary	The page answers many different questions on a wide variety of topics: the RIVM, disease of the RVP, vaccinations of the RVP, schedules of the RVP, vaccinations with illnesses and allergies, protection by the RVP vaccinations, organization of the RVP, side effects of the RVP vaccinations, alternatives, extra questions and answers. All the questions are also FAQ's asked by the RIVM, only the NVKP has made its own answer to every question. In order to see a clear difference, the NVKP has put the answer of the RIVM in one column and their answer in the other. The self-formulated questions are clearly biased against vaccinations and against the RVP.
High perceived credibility	Semi
2 way communication dialogue	Semi, but it encourages parents to contact them when they want more information or to go to one of the practitioners.
Accessible language	Highly accessible language.
Pro-active stance	Yes, it also gives information on where parents can find more information
Good visible	Yes
Highly transparent	No, it does not provide full answers to the questions, and formulates answers without well formulated arguments.

NVKP 12: Frequently asked questions

What	Sub web page: Webshop
Name	Webshop
Where	http://nvkp.nl/webshop/
Summary	A list of all the books and information the NVKP sells.
High perceived credibility	Not applicable
2 way communication dialogue	No, but it encourages parents to buy the book
Accessible language	Yes
Pro-active stance	Yes
Good visible	Yes
Highly transparent	Not applicable

NVKP 13: webshop

What	Sub web page: practitioners
Name	practitioners
Where	http://nvkp.nl/behandelaars/behandelaars-locator/
Summary	A map where you can find a practitioner near you. However there is not really explained what the practitioner are for and what they do.
High perceived credibility	Not applicable
2 way communication dialogue	No, but it encourages to contact a practitioner
Accessible language	Yes
Pro-active stance	Yes
Good visible	Yes
Highly transparent	No, it does tell the link between NVKP and the practitioner or even what the practitioner exactly do.

NVKP 14: practitioner

What	Sub web page: Contact
Name	Contact
Where	http://nvkp.nl/contact/
Summary	It gives all the contact information and when one can reach the association.
High perceived credibility	Not applicable, it gives more credibility to the association though as they are more accessible.
2 way communication dialogue	No, but it strongly encourage a two way communication dialogue.
Accessible language	Highly accessible language.
Pro-active stance	Yes
Good visible	Yes
Highly transparent	Yes

NVKP 15: contact

Extra note, it is possible to log in on the site by an account. The prices for an account are as following:

With a manual bank transfer €35,50 for a full year and from July 1 €22,00

With a yearly direct debit: full Year €33 and from July 1 €19,50

XII. Content on the website Vaccinvrij

What	Homepage of website Vaccinvrij
Name	Home
Where	https://vaccinvrij.nl/
Summary	The homepage gives a short introduction to the website, with short links to several pages. It explains the core of the website (door Frankema's E-book) and an introduction with a short movie (4.11) by door Frankema. She makes you curious to dive deeper into the topic.
High perceived credibility	Yes, also by saying: you can do your own research and gain information, hereby saying that it is all dependent of you, making it seem even more credible.
2 way communication dialogue	No
Accessible language	Highly accessible language
Pro-active stance	Yes, everything is explained beforehand and stimulates you to question things about which you might not have thought before.
Good visible	Yes, also this website is easily found on google (good SEO) and door Frankema is a well-known person in this field.
Highly transparent	Yes, as it appears.

Vaccinvrij 1: Home

What	Webpage
Name	Parents/parents platform
Where	https://vaccinvrij.nl/ouders/
Summary	From this page one can go to the parent's platform, survey, ask questions to doctors, and join. Parents can also sign a public declaration for a transparent vaccination policy. (However nowhere is stated it is not transparent?) Moreover the introduction of this page plays into the feelings of a person like: do you feel isolated because the whole village thinks different about vaccinating than you? Or do you feel something is not good about the vaccination story etc.
High perceived credibility	Yes, also by aiming for a transparent vaccination policy.
2 way communication dialogue	No
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes
Highly transparent	Yes, it appears

Vaccinvrij 2: Parents/parents platform

What	Sub web page of parents
Name	Parents platform
Where	https://vaccinvrij.nl/ouderplatform/
Summary	A platform where parents can share their experiences and help each other out. There are five different categories: growing up without vaccinations, infection disease by vaccinated and unvaccinated children, unwanted vaccination reactions and the recovering of this, the CB/doctor/hospital and teenagers (HPV)
High perceived credibility	Yes
2 way communication dialogue	Yes, people have the chance to share their thoughts and feelings and to respond to each other's thoughts and feelings
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes
Highly transparent	Yes

Vaccinvrij 3: Parents/parents platform – parents platform

What	Sub web page of parents/parents platform
Name	Questionnaire
Where	https://vaccinvrij.nl/enquete/
Summary	Vaccinvrij is doing a research on differences between vaccinated and unvaccinated children. E.g. who gets more acute infection diseases, who have more chronic diseases and whoms general health is better.
High perceived credibility	Yes

2 way communication dialogue	Semi, parents can let know their experience but it is not a dialogue.
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes
Highly transparent	Yes

Vaccinrij 4: Parents/parents platform – questionnaire

What	Sub web page of parents/parents platform
Name	Questions to doctors and policy makers
Where	https://vaccinrij.nl/vragen-artsen-beleidsmakers/
Summary	A very short page asking why parents as well as doctors don't know about the content of vaccinations, and why we don't accept the responsibility. If you want to know more you can go to the blog of door Frankema
High perceived credibility	No
2 way communication dialogue	No, it encourages a communication dialogue with others but not with the communicator (Vaccinrij)
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes
Highly transparent	No, also because it does not give any more information than this.

Vaccinrij 5: Parents/parents platform – questions to doctors

What	Sub web page of parents/parents platform
Name	Do you join?
Where	https://vaccinrij.nl/doe-je-mee/
Summary	A call for action. Do you want to determine the healthcare of your own child? Talk about it, spread flyers, fill in the questionnaire, give the book as a gift, inform yourself and spread the information. The page has links to: experience stories, questionnaire and the public declaration.
High perceived credibility	Yes
2 way communication dialogue	No, stimulation of communication with others but not with the communicator.
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes
Highly transparent	Yes

Vaccinrij 6: Parents/parents platform – do you join?

What	Web page
Name	Professionals
Where	https://vaccinrij.nl/professionals/
Summary	Introduction to the sub web pages stating that not only parents but also doctors and scientists are discovering that there is another side to vaccinations.
High perceived credibility	Yes – by linking it to doctors and other professionals
2 way communication dialogue	No
Accessible language	Highly accessible language
Pro-active stance	Yes, by introducing already new aspects to the problem
Good visible	Yes
Highly transparent	Yes, they show also the side of the professionals

Vaccinrij 7: Professionals

What	Sub web page of professionals
Name	Doctors
Where	https://vaccinrij.nl/artsen/
Summary	Doctors at the CB or in practices follow the RVP, but not all doctors are behind the RVP. On this page is a link to an interview Frankema conducted with a doctor but also links to websites where doctors unite and speak against the safety of vaccinations. And websites of other doctors whom are against vaccinations.
High perceived credibility	Yes, especially because this page is all focused on doctors who are against vaccinations, and doctors in general have a high credibility.
2 way communication dialogue	No
Accessible language	Highly accessible language

Pro-active stance	Yes
Good visible	Yes
Highly transparent	Semi, it only gives the side of doctors against and not pro

Vaccinvrij 8: Professionals – doctors

What	Sub web page of professionals
Name	Scientists
Where	https://vaccinvrij.nl/wetenschappers/
Summary	On this page the objectivity of the researchers of vaccinations is questioned. Articles and books can be found on this page which appear to state many conspiracies against the vaccination industry. The page also has links to websites and short movies on the real effect of vaccinations on one's body.
High perceived credibility	Yes, especially because this page is all focused on scientists, and scientists speak here about the vaccinations.
2 way communication dialogue	No
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes
Highly transparent	Semi, it only gives information from the scientists against vaccinations, there is no debate or anything.

Vaccinvrij 9: Professionals – scientists

What	Sub web page of professionals
Name	Journalists
Where	https://vaccinvrij.nl/journalisten/
Summary	Speaks about how is reported about news concerning vaccinations and infection diseases. E.g. is the media right when an epidemic is predicted and the seriousness of this. It asks a lot of questions and doesn't give answers or try to show it from different sides. It also contains links to short movies and articles concerned with this topic. It makes you think a lot about it, but on the other hand it does not say something like: maybe the media and governments exaggerate about epidemics but on the other hand this could also have exactly the wished effect because otherwise it might even spread more. The page basically asks a lot of questions while pushing you into one direction.
High perceived credibility	Yes, because journalists are perceived as objective and nonbiased
2 way communication dialogue	No
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes
Highly transparent	Semi

Vaccinvrij 10: Professionals – journalists

What	Sub web page of professionals
Name	Judge/Lawyers
Where	https://vaccinvrij.nl/rechters-advocaten/
Summary	Abroad and then especially America, several lawsuits have been won as a result of vaccinations. This page states e.g. where is the proof that vaccinations are safe? It asks where the responsibility lays as no one in the Netherlands at least takes responsibility. And it helps with how parents can get their right.
High perceived credibility	Semi, many examples are from the US, however they have a very different system than the Netherlands
2 way communication dialogue	No
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes
Highly transparent	No

Vaccinvrij 11: Professionals – judge/lawyers

What	Web page
Name	Choices
Where	https://vaccinvrij.nl/keuzes/

Summary	Critics on the RVP and how they inform people. Vaccinvrij believes that they leave out information and that all information given is very one sided.
High perceived credibility	No
2 way communication dialogue	No
Accessible language	Highly accessible language
Pro-active stance	Yes, already informs beforehand.
Good visible	Yes
Highly transparent	No

Vaccinvrij 12: choices

What	Sub web page of choices
Name	Rijksvaccinatieprogramma (RVP)
Where	https://vaccinvrij.nl/rijksvaccinatieprogramma-rvp/
Summary	Gives a list with 10 reasons to reconsider the RVP and about all the bad things of the RVP. Some arguments are also incomplete and deceiving e.g.: The profit made on vaccination is phenomenal, the top 15 most popular vaccinators are good for a turnover of 12.250.000.000 dollar. This turnover does not tell the profit at all.
High perceived credibility	No
2 way communication dialogue	No
Accessible language	Highly accessible language, here and there some populist words are used.
Pro-active stance	Semi, the communicator only uses the arguments for one sided readers.
Good visible	Yes
Highly transparent	No, it does not give all the facts

Vaccinvrij 13: choices - RVP

What	Sub web page of choices
Name	Hepatitis – B vaccine
Where	https://vaccinvrij.nl/hepatitis-b-vaccin/
Summary	Strong introduction: hep-B is mainly a disease amongst prostitutes, drug addicts and alcoholics. The page is very short but the message is clear: do you want to associate your child with the above standing group? Do we need this vaccination?
High perceived credibility	No (barely sources available)
2 way communication dialogue	No
Accessible language	Highly accessible language, however very strong and deceiving
Pro-active stance	Yes, it comes with arguments people might have about hep-B
Good visible	Yes
Highly transparent	No, it only gives one very small part of the story away.

Vaccinvrij 14: Choices – Hepatitis B

What	Sub web page of choices
Name	Tetanus
Where	https://vaccinvrij.nl/tetanus-vaccin/
Summary	It is a very short page, questioning how tetanus can work as a vaccine when you barely get immune for it when you get the disease. With links for if you want to know more.
High perceived credibility	No, too little information
2 way communication dialogue	No, although encouraged by responding through the parent platform.
Accessible language	Highly accessible language, but the text only exists of questions
Pro-active stance	Semi
Good visible	Yes
Highly transparent	No

Vaccinvrij 15: choices – tetanus

What	Sub web page of choices
Name	HPV vaccine
Where	https://vaccinvrij.nl/baarmoederhalskanker-vaccin-hpv-vaccin/
Summary	It is not only about the HPV vaccine, but about vaccinations in general and how much vaccinations are awaiting is. It talks about this vaccinations also for boys and the overall tone is very negative.

High perceived credibility	No, the text is too much based on American sources, however in the US they don't even use the same vaccine.
2 way communication dialogue	No
Accessible language	Highly accessible language, however there are type errors.
Pro-active stance	Yes
Good visible	Yes
Highly transparent	No, and it is full with incomplete arguments and things that are not relevant.

Vaccinrij 16: choices – HPV

What	Sub web page of choices
Name	Future vaccines: mandatory or voluntary in the Netherlands
Where	https://vaccinrij.nl/toekomstige-vaccins/
Summary	Afraid for mandatory vaccinations in the future. Talks about the fact that vaccinations are for some professions. But is also says that babies cannot be refused in a day-care when they are not vaccinated, emphasizing the voluntary aspect. Says that there is no difference between the US and Netherlands, in the US it is mandatory. Because due to the lack of information we make our choice in the same way as them.
High perceived credibility	No, again a lot of comparison to the U.S.
2 way communication dialogue	No
Accessible language	No =The text should be read with attention, the way it is written is slightly deceiving.
Pro-active stance	Yes
Good visible	Yes
Highly transparent	No

Vaccinrij 17: choices – future vaccines

What	Web page
Name	More information
Where	https://vaccinrij.nl/meer-info/
Summary	Introductory page to the following pages, explaining why we need more information. The emphasis lays here on the fact that money is involved, all information is coming from the government and they have different gains than the parents by vaccinating. According to Frankema the experience of parents is that parents want something totally different when it comes to information than the government distributes.
High perceived credibility	No
2 way communication dialogue	No
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes
Highly transparent	No, where does she get the information from about the government e.g.? also the information seems incomplete.

Vaccinrij 18: more information

What	Sub web page of more information
Name	Frequently asked questions
Where	https://vaccinrij.nl/veelgestelde-vragen/
Summary	According to Frankema two questions: how do I keep my child healthy and how do I take care my chronically ill child recovers. They say there is not one answer to this and when parents want to know this they can go to the Facebook page and ask their question.
High perceived credibility	No
2 way communication dialogue	No, but encouraged by e.g. asking a question on the Facebook page.
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes
Highly transparent	No

Vaccinrij 19: more information – FAQ's

What	Sub web page of more information
Name	Articles

Where	https://vaccinvrij.nl/artikelen/
Summary	Gives parents a helping hand when they don't know where and how to find more information. She mainly gives articles of herself and some others.
High perceived credibility	No
2 way communication dialogue	Semi, it is encouraged by becoming a member of the Facebook page and ask questions and more information here
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes
Highly transparent	No

Vaccinvrij 20: more information – articles

What	Sub web pages of more information
Name	Books, Youtubes, websites, DVD's blogs
Where	
Summary	Gives a list with where more information can be found
High perceived credibility	Semi
2 way communication dialogue	No
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes
Highly transparent	No

Vaccinvrij 21: more information –

What	Sub web page of more information
Name	Information leaflets
Where	https://vaccinvrij.nl/bijsluiters/
Summary	Frankema says the information leaflets cannot be trusted and meet exactly the standards which are required by the government. Therefore she made an information leaflet with real and good information.
High perceived credibility	No
2 way communication dialogue	No
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes
Highly transparent	No

Vaccinvrij 22: more information – information leaflets

What	Web page
Name	Blog
Where	https://vaccinvrij.nl/blog/
Summary	A blog with a variety of topics all linked to vaccinations and infection diseases. The posts are from 2012 up to now and if wished you can click on a topic and read more about it.
High perceived credibility	Semi
2 way communication dialogue	No
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes
Highly transparent	No, a blog is not transparent but more opinions and therefore not transparent.

Vaccinvrij 23: Blog

What	Web page
Name	Current topics
Where	https://vaccinvrij.nl/aktueel/
Summary	It looks like this page has just started, as there is only one article, but it looks like it will be a news feed.
High perceived credibility	Yes
2 way communication dialogue	No
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes

Highly transparent	Yes
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Vaccinrij 24: current topics

What	Web page
Name	About us
Where	https://vaccinrij.nl/over-ons/
Summary	Making us a group, so the communicator and the people who visit the site. With saying: who are coming on this website? Searching parents, worried parents, responsible parents and active parents. They want to introduce each other, it looks like a group.
High perceived credibility	Not applicable
2 way communication dialogue	No
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes
Highly transparent	Yes

Vaccinrij 25: about us

What	Sub web page of about us
Name	Who is by Frankema?
Where	https://vaccinrij.nl/wie-is-door-frankema/
Summary	Introduction to the founder of this page and the writer of the book/ articles etc. She tells who she is where she lives, and how she got so involved in this topic
High perceived credibility	Yes
2 way communication dialogue	No, but it feels personal
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes
Highly transparent	Yes

Vaccinrij 26: about us – who is by frankema?

What	Sub web page of about us
Name	Who are the employees of Vaccinrij?
Where	https://vaccinrij.nl/wie-zijn-de-medewerkers-van-vaccinrij/
Summary	Introduction to everybody who helps with the website. And how they came to it and got so involved.
High perceived credibility	Yes
2 way communication dialogue	No, but it feels personal
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes
Highly transparent	Yes

Vaccinrij 27: about us – employees of Vaccinrij

What	Sub web page of about us
Name	What is our mission/vision
Where	https://vaccinrij.nl/waar-staan-wij-voor/
Summary	What Vaccinrij wants to reach with this website and the other things they do.
High perceived credibility	Yes
2 way communication dialogue	No, but is encouraged by joining in on the parents platform
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes
Highly transparent	Yes

Vaccinrij 28: about us – mission/vision

What	Sub web page of about us
Name	Contact
Where	https://vaccinrij.nl/contact/
Summary	Contact form, it is not possible to send them an E-mail or call them from your own device.
High perceived credibility	No

2 way communication dialogue	Yes
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes
Highly transparent	Not applicable

Vaccinrij 29: about us

So much is based on the US and compared to the US, however the Netherlands is a very different country than the US.

XIV. Facebook page of Vaccinatiegekte

General information	https://www.facebook.com/groups/239667059418249/?fref=ts
Members	16041
General description page	If you have any questions please asked them, many members of this group will have the knowledge to help you and to answer them.
Total amount of posts (period 18/03/2016- 18/4/2016)	96

Vaccinatiegekte: General

Topic	Sharing an article
Date	18/04/2016
Summary	A link to an interview with Wakefield and Del Bigtree, a discussion about the movie Vaxxed.
Likes	2
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 1

Topic	Sharing an article
Date	17/04/2016
Summary	As a mother I found out in one year, much more about vaccinations than during a six year medicine study
Likes	7
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 2

Topic	Sharing an article
Date	17/04/2016
Summary	The truth about cancer, blind spots and toxic vaccines
Likes	0
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 3

Topic	Shared an article
Date	17/04/2016
Summary	The 72 year old doctor, Hans van der Linde states that the pharmaceutical industry pursues patients with many dangerous medication.
Likes	8
Comments	2
General tone of the comments	On the pharmaceutical bosses: Not that all of them are monsters, but they do have to make more money than last year.

High perceived credibility	Semi, (the article is based on a doctor)
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 4

Topic	Sharing an article
Date	17/04/2016
Summary	Robert de Niro attacked for asking questions about vaccines and promoting freedom of speech
Likes	5
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 5

Topic	Shared an article
Date	17/04/2016
Summary	Dark side of Bill Gates' philanthropy: 30.000 Indian girls were used as guinea pigs to test vaccines.
Likes	1
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 6

Topic	Shared an article
Date	17/04/2016
Summary	Pharmaceutical company is given a small fine for killing babies in vaccine trial
Likes	0
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 7

Topic	Shared an article
Date	15/04/2016
Summary	Did a baby die because of a combination vaccination?
Likes	2
Comments	4
General tone of the comments	Shocked, tagging friends so they can read it
High perceived credibility	Semi
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language

Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatiegekte 8

Topic	Shared a photo and text
Date	16/04/2016
Summary	The dangers vaccines have for a child
Likes	4
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	No, it is translated by Google translate and hard to understand
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 9

Topic	Shared an article
Date	15/04/2016
Summary	Sarcastic text about the minister of public health, and how stupid vaccinations are
Likes	3
Comments	6
General tone of the comments	Negative: e.g. how much money do you think she gets from pharmaceutical companies? Look into her eyes and you can see she sold her soul to the devil.
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 10

Topic	Shared an article
Date	15/04/2016
Summary	Half of children brain tumours have a virus which came in by the polio vaccination
Likes	4
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	No, it is translated by Google translate and hard to understand
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatiegekte 11

Topic	Shared a link of vaccine free
Date	12/04/2016
Summary	We are deeply touched by the message that Kees passed away after years of fighting. Kees who became heavily handicapped after vaccinating.
Likes	8
Comments	1
General tone of the comments	Negative, claiming that the whooping cough component is very dangerous and that it is probably responsible for the microfecalic babies in Brazil
High perceived credibility	Semi, for the believers yes
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes

Good visible	Yes, when notifications are on
Highly transparent	no

Vaccinatiegekte 12

Topic	Shared an article
Date	14/04/2016
Summary	It is official: FDA announced that vaccines are causing autism!
Likes	2
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 13

Topic	Shared an article
Date	12/04/2016
Summary	Eight European countries start a research on ADHD, negative about this
Likes	2
Comments	3
General tone of the comments	Wondering if vaccinations would be taken into account
High perceived credibility	Yes
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatiegekte 14

Topic	Shared a post of the Vaccinatieraad
Date	14/04/2016
Summary	Claiming that the vaccination business, doesn't earn as much money anymore and therefore the workers union works together with GGD and you can get a 10% discount on travel vaccinations.
Likes	0
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatiegekte 15

Topic	Shared a post of Vaccinatieraad
Date	14/04/2016
Summary	Components of a vaccination
Likes	1
Comments	0
General tone of the comments	Not applicable
High perceived credibility	Yes
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	No it is in German
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatiegekte 16

Topic	Shared a link to the movie
Date	14/04/2016
Summary	A prime for viewing Vaxxed
Likes	2
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 17

Topic	Shared a post of Vacruth
Date	13/04/2016
Summary	Robert de Niro fully supports the film Vaxxed and admits that the CDC hides data concerning the safety of vaccines
Likes	4
Comments	0
General tone of the comments	Not applicable
High perceived credibility	Semi
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 18

Topic	Shared a post of Vacruth
Date	13/04/2016
Summary	What we can learn from Vaxxed
Likes	1
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 19

Topic	Shared a post of : lieve Provoost
Date	12/04/2016
Summary	Someone who is looking for people who have also lost their (grand)child between the age of 14-17 months
Likes	2
Comments	1
General tone of the comments	Link to the website of vaccine free
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 20

Topic	Shared a post of Vacruth
Date	12/04/2016
Summary	Parents have the right to know what for disgusting elements are in vaccinations

Likes	1
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	No, it is translated by Google translate and hard to understand
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 21

Topic	Shared an article
Date	12/04/2016
Summary	Nobody tells you about the risks of vaccinations
Likes	1
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	No, it is in German
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 22

Topic	Shared an image
Date	11/04/2016
Summary	All things that can be caused by vaccines: autism, asthma, allergies etc.
Likes	1
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Semi, it is in English
Pro-active stance	Yes
Good visible	No
Highly transparent	Yes

Vaccinatiegekte 23

Topic	Shared an article
Date	09/04/2016
Summary	Activist doctor sues pharmaceutical companies
Likes	10
Comments	3
General tone of the comments	He is a hero
High perceived credibility	Yes
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatiegekte 24

Topic	Shared an article
Date	11/04/2016
Summary	The lies of Ab Osterhaus and the Spanish flue
Likes	3
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other

Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 25

Topic	Shared an image
Date	11/04/2016
Summary	Puzzle piece with text: There is no missing piece it's the vaccines
Likes	1
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	It is in English
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 26

Topic	Shared a post of the National Vaccine Information Centre
Date	07/04/2016
Summary	Toxic phenol ingredient in vaccines
Likes	1
Comments	1
General tone of the comments	Tagging a friend to read it
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	No, it is translated by Google translate and hard to understand
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 27

Topic	Shared an article
Date	07/04/2016
Summary	Japanese victims of HPV vaccination sue pharmaceutical
Likes	4
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 28

Topic	Invitation for an event
Date	07/04/2016
Summary	A symposium with Andrew Wakefield
Likes	1
Comments	0
General tone of the comments	Not applicable
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	It is in German
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Not applicable

Vaccinatiegekte 29

Topic	Shared an article
Date	24/03/2016
Summary	Sarcastic article: welcome to this world little one, lets first stow you full with vaccinations.
Likes	11
Comments	3
General tone of the comments	How terrible all this vaccinations in one such a little baby
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 30

Topic	Shared an article
Date	05/04/2016
Summary	Infant is paralyzed an brain damage after vaccinations
Likes	3
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	It is in English
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 31

Topic	Shared a post of the national vaccine information centre
Date	05/04/2016
Summary	Free copies for the vaccine reaction
Likes	0
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 32

Topic	Shared a post of Jock William Doubleday
Date	04/04/2016
Summary	Vaccines are the backbone of the pharmaceutical industry, if they can get children sick early, they are their customers for life.
Likes	1
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	It is in English
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 33

Topic	Shared an article
Date	03/04/2016
Summary	Parents question vaccines as epilepsy rates increase

Likes	1
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	It is in English
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 34

Topic	Shared an article
Date	01/04/2016
Summary	A prestigious film festival shows the anti-vaccination movie
Likes	14
Comments	5
General tone of the comments	Stop with vaccinating and just accept it
High perceived credibility	Yes
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatiegekte 35

Topic	Shared an article
Date	01/04/2016
Summary	Vaxxed will be showed in new York and Wakefield comes to Germany
Likes	19
Comments	2
General tone of the comments	Relieved that something important happens
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 36

Topic	Invitation for event
Date	01/04/2016
Summary	Door Frankema comes to Hasselt
Likes	0
Comments	0
General tone of the comments	Not applicable
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatiegekte 37

Topic	Shared an article
Date	01/04/2016
Summary	How the pharmaceutical industry keeps you ill (photo with Mc Donalds and an injection needle)
Likes	4
Comments	1
General tone of the comments	That this is definitely not true as the whole website write from a conspiracy theory.

High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 38

Topic	Shared a picture
Date	01/04/2016
Summary	The first critical banner of critical vaccinations is there
Likes	1
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	It is in German
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 39

Topic	Shared an article
Date	01/04/2016
Summary	Vaccines are linked to autism
Likes	0
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	It is in English
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 40

Topic	Shared a post
Date	01/04/2016
Summary	How polio can be prevented (a research)
Likes	0
Comments	0
General tone of the comments	Not applicable
High perceived credibility	Yes
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 40

Topic	Shared an article
Date	31/03/2016
Summary	Shocking report of medical world insiders
Likes	1
Comments	0
General tone of the comments	Not applicable
High perceived credibility	Semi
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on

Highly transparent	Yes
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Vaccinatiegekte 41

Topic	Question
Date	30/03/2016
Summary	Quest if anyone has experience to not vaccinate for polio
Likes	1
Comments	10
General tone of the comments	No helpful information, many people are just saying: my children don't get any vaccinations and that's it.
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 42

Topic	Shared a post of vactruth.com
Date	31/03/2016
Summary	A girl who passed away in her sleep, people think because of vaccinations
Likes	2
Comments	1
General tone of the comments	Sad
High perceived credibility	Semi
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 43

Topic	Shared an article
Date	31/03/2016
Summary	The petition goal for Vaxxed is reached
Likes	13
Comments	0
General tone of the comments	Not applicable
High perceived credibility	Yes
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	It is in English
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatiegekte 44

Topic	Shared an article
Date	30/03/2016
Summary	The aluminium and mercury in vaccines cause autism
Likes	1
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 45

Topic	Shared a post
Date	29/03/2016

Summary	The government denies food allergies as vaccine injury
Likes	0
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	It is in English
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatiegekte 46

Topic	Shared an article
Date	29/03/2016
Summary	Scandal in china with millions of non-working vaccines
Likes	5
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 47

Topic	Shared a movie
Date	29/03/2016
Summary	See how stupid the big pharmaceuticals are
Likes	2
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	It is in English
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 48

Topic	Shared an article
Date	28/03/2016
Summary	Child got autism of a vaccination
Likes	4
Comments	2
General tone of the comments	Very old news
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 49

Topic	Shared an article
Date	28/03/2016
Summary	Autism and leukaemia in vaccines
Likes	3
Comments	1
General tone of the comments	Share as much as possible
High perceived credibility	No

2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 50

Topic	Shared an article
Date	27/03/2016
Summary	Vaccination study thinks many death is acceptable
Likes	8
Comments	1
General tone of the comments	How is it possible parents still vaccinate their children
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 51

Topic	Shared an article
Date	28/03/2016
Summary	Bill Gates' polio vaccine has created super polio
Likes	1
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	It is in English
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 52

Topic	Question
Date	27/03/2016
Summary	After three years of following the general vaccination schedule with my son, I doubt whether I want to continue with this, can you help?
Likes	0
Comments	8
General tone of the comments	Many links to vaccine free
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 53

Topic	Shared a Youtube movie
Date	27/03/2016
Summary	Whistle blower CDC says vaccinations are designed to kill kids
Likes	2
Comments	1
General tone of the comments	Puke of this
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	No
Pro-active stance	Yes
Good visible	Yes, when notifications are on

Highly transparent	No
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Vaccinatiegekte 54

Topic	Shared a post of Marcelle Piper-Tierry
Date	26/03/2016
Summary	Over 50 doctors explain why vaccines are not safe or effective
Likes	3
Comments	0
General tone of the comments	Not applicable
High perceived credibility	Semi
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 55

Topic	Invitation for an event
Date	25/03/2016
Summary	Door Frankema, Cisca Buis, Tineke Schaper and John Consemuled will give a lecture on vaccinations and will answer questions
Likes	1
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 56

Topic	Shared an article
Date	24 /03/2016
Summary	A change is made in the current application protocols of HPV in Colombia
Likes	0
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	It is in English
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 57

Topic	Shared a picture of Vactruth
Date	24/03/2016
Summary	Everything I've been telling my patients (about vaccinations) for the last 10 years has been based on a lie and cover up. (stands on the picture
Likes	2
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	It is in English
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatiegekte 58

Topic	Shared an article
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Date	23/03/2016
Summary	The components of vaccinations are extremely dangerous for humanity. Do you know any child who doesn't have something?
Likes	5
Comments	1
General tone of the comments	My children are good, because I didn't vaccinate them
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 59

Topic	Shared a link
Date	23/03/2016
Summary	Vaccinations have advantages and disadvantages
Likes	0
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatiegekte 60

Topic	Shared a post of Vactruth
Date	22/03/2016
Summary	An explanation why doctors recommend vaccinations, this is the fault of the pharmaceutical companies and government
Likes	2
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	It is in English
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 61

Topic	Shared a link
Date	22/03/2016
Summary	A new vaccine free website is online
Likes	7
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 62

Topic	Shared a post of Vactruth
Date	22/03/2016
Summary	The truth about the vaccine ingredients like aluminium
Likes	0

Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	The post is in English, and the translated part is done by Google translate and therefore difficult to understand.
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 63

Topic	Shared a link of the Gazet van Antwerp
Date	20/03/2016
Summary	Europe is polio free, officially announced by the WHO
Likes	5
Comments	6
General tone of the comments	Discussion about how bad it is that the vaccination against polio is still mandatory in Belgium
High perceived credibility	Yes
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 64

Topic	Shared a link to the newspaper,
Date	19/03/2016
Summary	A child passed away on diphtheria in Belgium, the person who posts this is curious about the reactions of the members of the group
Likes	0
Comments	6
General tone of the comments	Also vaccinations don't guarantee your health
High perceived credibility	Yes
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatiegekte 65

Topic	Shared a post of Vactruth
Date	18/03/2016
Summary	It offers a collection of resources to build a case against vaccinations.
Likes	2
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	It is in English
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatiegekte 66

XV. Facebook page of Vaccinatietwijfelaars

General information	
Link	https://www.facebook.com/groups/287992694698294/
Members	1440
General description page	This page was initially a page where doubters about vaccinations could discuss with peers what they were doing and how they felt. However it changed into a discussion page for the anti and the pro vaccinators. The owner is ok with this, however he want it to still be only about vaccinations and has created some secret groups for the real doubters.
Total amount of posts (period 18/03/2016- 18/4/2016)	91

Vaccinatietwijfelaars: General

Topic	Vaccinating to prevent infertility, Question
Date	18/04/2016
Summary	A mother decided to not vaccinate her children, however now they still didn't get any diseases she gets reluctant as for instance rubella at a later age can lead to infertility, and she asks whether this would be a reason to vaccinate her children still.
Likes	0
Comments	8
General tone of the comments	Supportive advice and sharing experiences
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the question and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notification are on
Highly transparent	Not applicable

Vaccinatietwijfelaars 1

Topic	Sharing of article
Date	18/04/2016
Summary	15 Syrian children died after UN measles vaccinations, because they were given a muscle relaxant instead of the vaccination
Likes	12
Comments	12
General tone of the comments	Shocked but also distrust
High perceived credibility	Yes
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatietwijfelaars 2

Topic	Sharing an article
Date	18/04/2016
Summary	Fraud in the vaccination world and mistrusting science
Likes	0
Comments	0
General tone of the comments	Not
High perceived credibility	No
2 way communication dialogue	Yes, people can respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatietwijfelaars 3

Topic	Mom vs. doctor
Date	17/04/2016
Summary	Posted by a woman who posts a lot, an anonymous posts of a doctor who learned more about vaccinations while being a mom than studying medicine, and is reluctant towards vaccinations now.
Likes	14
Comments	3
General tone of the comments	Negative towards the anonymity, saying that everyone could be a doctor.
High perceived credibility	no
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language and very strong
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 4

Topic	Vaccines are the number one cause of cancer
Date	17/04/2016
Summary	A text about why all vaccinations are contaminated
Likes	3
Comments	2
General tone of the comments	Agreeing but also questioning about unvaccinated people with cancer
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	It is in English
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 5

Topic	Sarcastic message about the minister of public health
Date	15/04/2016
Summary	A sarcastic post with sharing an article.
Likes	5
Comments	15
General tone of the comments	Negative towards the government and doctors
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 6

Topic	Question about what a doctor said from the CB
Date	15/04/2016
Summary	Whether your child needs less vaccinations when you start later with vaccinating.
Likes	0
Comments	3
General tone of the comments	Supportive advice and sharing of own experiences
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatietwijfelaars 7

Topic	Question do I give the antibodies to my children?
Date	16/04/2016

Summary	Whether it helps that she was vaccinated in case she won't vaccinate her children and that she is still doubting.
Likes	0
Comments	14
General tone of the comments	Supportive advice and honest answering her question
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatietwijfelaars 8

Topic	Question
Date	12/04/2016
Summary	Should I, or not, give my child the vaccination against BMR and DKTP
Likes	1
Comments	27
General tone of the comments	Wide variation, answers pro vaccination, answers against, one woman actually responds with an article about children whom passed away two days after a vaccination.
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Not applicable

Vaccinatietwijfelaars 9

Topic	Sharing of an article
Date	12/04/2016
Summary	Setting Bill Gates in a negative light
Likes	4
Comments	13
General tone of the comments	Conspiracy theorists
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 10

Topic	Sharing article
Date	15/04/2016
Summary	Baby killed by combination vaccination?
Likes	14
Comments	11
General tone of the comments	Feeling bad for the parents, also linked to that the parents made a dumb mistake by vaccinating their child
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 11

Topic	Sharing article
Date	14/04/2016
Summary	It is official: vaccinations cause autism
Likes	1

Comments	2
General tone of the comments	Sarcastic responses
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 12

Topic	Sharing article
Date	22/03/2016
Summary	Fake news websites in the Netherlands, which have the aim to make money. The article is linked to vaccinations and which articles about vaccinations are not true and how people respond to them.
Likes	6
Comments	30
General tone of the comments	Discussion about how this links to vaccinations
High perceived credibility	Yes, it is from the NRC
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatietwijfelaars 13

Topic	Question about the movie Vaxxed
Date	08/04/2016
Summary	Was Andrew Wakefield in this movie and wasn't he controversial? Can someone talk me up. And why is this movie so much spoken about?
Likes	0
Comments	7
General tone of the comments	One woman feels strongly for Wakefield and responds sarcastically, the others respond in a normal way and answer her questions.
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 14

Topic	Rehabilitated Wakefield article
Date	13/04/2016
Summary	Wakefield is rehabilitated and sharing an article
Likes	0
Comments	2
General tone of the comments	One says complete nonsense and someone else responds by questioning to that why his partner did get rehabilitated
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 16

Topic	Sharing article
Date	13/04/2016
Summary	Unvaccinated children are more healthy than vaccinated children
Likes	9
Comments	7

General tone of the comments	Agreement and sharing own experiences
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatietwijfelaars 17

Topic	Sharing article
Date	15/04/2016
Summary	Do vaccinations cause cancer?
Likes	0
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 18

Topic	Announcement
Date	15/04/2016
Summary	Person is happy she is added to the group and hopes to learn more as she is doubting about giving polio vaccination to her child.
Likes	2
Comments	4
General tone of the comments	Nice and welcoming
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatietwijfelaars 19

Topic	Sharing of article
Date	14/04/2016
Summary	Unvaccinated children are more healthy than vaccinated children
Likes	2
Comments	1
General tone of the comments	The article she shares is not complete and do not tell everything the research has pointed out
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 20

Topic	Sharing article, two days after vaccinations our son was dead
Date	14/04/2016
Summary	Vouching that with every child that passes away the doctors should figure out whether he/she got a vaccination or not.
Likes	8
Comments	11
General tone of the comments	Questions, worrying about own children and happy they don't vaccinate.
High perceived credibility	No

2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	No
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 21

Topic	Question
Date	14/04/2016
Summary	Doubting whether she should or not give her children the measles vaccinations as she overheard two old women talking how happy they are that the children now don't get the measles anymore.
Likes	1
Comments	17
General tone of the comments	Two sided
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Not applicable

Vaccinatietwijfelaars 22

Topic	Question
Date	13/04/2016
Summary	Whether she can buy a single measles vaccine from France
Likes	0
Comments	3
General tone of the comments	Link to a pharmaceutical
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Not applicable

Vaccinatietwijfelaars 23

Topic	Question
Date	12/04/2016
Summary	How did your child responded to the measles vaccination?
Likes	2
Comments	25
General tone of the comments	Supportive and helpful
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Not applicable

Vaccinatietwijfelaars 24

Topic	Mad at the CB, question
Date	11/04/2016
Summary	Someone responded bad to her when he said she doesn't want to vaccinate
Likes	3
Comments	31
General tone of the comments	Mad at the CB, stating': like vaccinations make your child healthy etc.
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes

Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatietwijfelaars 25

Topic	Question
Date	30/03/2016
Summary	Are there other possibilities to get the DTKP vaccination when your child is three?
Likes	0
Comments	11
General tone of the comments	Supportive answers
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatietwijfelaars 26

Topic	Child passed away
Date	12/04/2016
Summary	Maybe a child passed away because of the vaccinations of 10 years ago
Likes	6
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 27

Topic	Shares an image
Date	12/04/2016
Summary	A conspiracy theory, that we don't get vaccinated because it is good for us, but because pharmaceuticals earn so much money with it.
Likes	3
Comments	1
General tone of the comments	Full agreement
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 28

Topic	Codes for insurance companies
Date	11/04/2016
Summary	Codes exists which doctors give to insurance companies when a child passed away by poisoning of a vaccination
Likes	0
Comments	3
General tone of the comments	What is the source? Doubting about whether this is true
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on

Highly transparent	No
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Vaccinatietwijfelaars 29

Topic	Question
Date	25/03/2016
Summary	What additional measures should I undertake when I don't vaccinate my child?
Likes	4
Comments	17
General tone of the comments	Helpful answers
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatietwijfelaars 30

Topic	Sharing article
Date	10/04/2016
Summary	Vaccinations cause autism
Likes	2
Comments	7
General tone of the comments	Agreement but also: don't believe everything you read on the internet
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	No
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 31

Topic	Sharing an article
Date	11/04/2016
Summary	An article written by a researcher which vouches that people don't just believe everything the pharmaceutical industry tells them and that you should do your own research.
Likes	2
Comments	1
General tone of the comments	Full agreement
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	No
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 32

Topic	Movie Vaxx link
Date	09/04/2016
Summary	Why the movie vaxx cannot be watched yet and also why this is beneficial.
Likes	0
Comments	3
General tone of the comments	People can't wait to see the movie
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	No
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 33

Topic	Question
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Date	08/04/2016
Summary	About the Syrian children that passed away after the vaccine, and whether people know if these children were contaminated with polio or not.
Likes	0
Comments	7
General tone of the comments	Generally with actions of the WHO, and accusing the WHO of leaving information out and lying.
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Not applicable

Vaccinatietwijfelaars 34

Topic	Question: what do you think of this article?
Date	03/04/2016
Summary	The writer found sources that the effects of vaccinating are minimum in comparison to the effects of not vaccinating
Likes	5
Comments	8
General tone of the comments	Stating that the writer is paid, disagreement
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 35

Topic	Question
Date	08/04/2016
Summary	Difference between DKTP for babies and older children
Likes	0
Comments	18
General tone of the comments	Where she can find more information and helpful answers what the differences could be and how the situation actually is.
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Not applicable

Vaccinatietwijfelaars 36

Topic	Discussion point
Date	04/04/2016
Summary	Do you really think autism is that bad? Cant we just see it as a way how someone develops instead of an illness?
Likes	6
Comments	23
General tone of the comments	Many people insulted and feel that autism is really something bad. Other people start again about autism and vaccinations.
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Not applicable

Vaccinatietwijfelaars 37

Topic	Question
Date	05/04/2016
Summary	About a weird sentence in a text on chicken pox according to the poster
Likes	0
Comments	10
General tone of the comments	Many people disagree with her statement and think she goes to far with looking for this type of things. The poster, is really convinced about her right and does not give in.
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	No
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatietwijfelaars 38

Topic	Sharing an image
Date	05/04/2016
Summary	Trying to smack down a fever when a child is sick, is like shooting your attack dog when someone is breaking into your house.
Likes	12
Comments	12
General tone of the comments	One woman looks for discussion and comes with all these hypotheses what the other moms would be doing.
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	No
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 39

Topic	Sharing article
Date	18/03/2016
Summary	A child passed away as a result of diphtheria
Likes	2
Comments	29
General tone of the comments	People accuse vaccinated children for the spread of diphtheria, people talk about propaganda(that the children were vaccinated but that they just don't tell this) , lot of distrust amongst the responses, people
High perceived credibility	Yes
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatietwijfelaars 40

Topic	Question
Date	04/04/2016
Summary	Should I vaccinate my child for meningitis? My doctor scared me a bit and now I'm doubting.
Likes	1
Comments	23
General tone of the comments	Mainly negative comments about the pharmaceutical industry, not very helpful
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 41

Topic	Sharing article
Date	02/04/2016
Summary	Pressure on vaccinating child against meningitis increases
Likes	0
Comments	15
General tone of the comments	Some people are very happy with the vaccinations, others talk negative about it and say it is not needed etc.
High perceived credibility	Yes
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	No
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 42

Topic	Sharing article/question
Date	05/04/2016
Summary	Article about child that passed away. The poster asks whether this child would still be alive when she was vaccinated against pox, she herself doesn't think so as the child also had some underlying diseases.
Likes	0
Comments	7
General tone of the comments	Nasty discussion
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Semi
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatietwijfelaars 43

Topic	Announcement
Date	05/04/2016
Summary	She announces that she doesn't want to be a member anymore of this group, because there is too much yes or no. Everybody tells something and that is the absolute right, she experiences this in all groups on this topics and is fed up with it.
Likes	3
Comments	9
General tone of the comments	Talk about the aggressively in the group and that however it is a group for doubters, most of information comes from one side: non vaccinators.
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatietwijfelaars 44

Topic	Question
Date	31/03/2016
Summary	Is chickenpox equally as bad as the measles? With information why we can compare the disease to each other and asking why we are afraid of the measles?
Likes	0
Comments	6
General tone of the comments	Big discussion, people supporting her, others are totally against it.
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language

Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 45

Topic	Sharing article
Date	05/04/2016
Summary	Vaccine whistle blower confirms the link between autism and vaccinations.
Likes	2
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	No
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 46

Topic	Sharing article
Date	03/04/2016
Summary	Vaccinating or not is the most important choice parents have to make for their children. If you want to protect your child from: autism, ADHD, allergies etc. you don't vaccinate your child.
Likes	0
Comments	7
General tone of the comments	People agreeing that vaccinating makes children less healthy. But also stating the opposite by saying e.g. that allergies already existed before we vaccinated people.
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	No
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 47

Topic	Movie Vaxxed
Date	02/04/2016
Summary	The first references about the movie Vaxxed have been announced.
Likes	2
Comments	4
General tone of the comments	Talk about the movie and whether it can be downloaded.
High perceived credibility	Yes
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	No, it is in English
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatietwijfelaars 48

Topic	Shared movie fragments
Date	04/04/2016
Summary	Shared movie fragments about corruption in the pharmaceutical industry from the TV programme Radar.
Likes	0
Comments	0
General tone of the comments	Not applicable
High perceived credibility	Yes
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language

Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatietwijfelaars 49

Topic	Question
Date	30/03/2016
Summary	She and her husband don't vaccinate their children, but her daughter has fallen very hard and now she doubts whether she should vaccinate her daughter for tetanus or not, she asks for feedback.
Likes	1
Comments	20
General tone of the comments	People are not very helpful. They mainly want to announce their opinion or experience on this matter but don't really help her with her question. Also many people go off-topic and continue with the general discussion why you should vaccinate or not.
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Not applicable

Vaccinatietwijfelaars 50

Topic	Obliged vaccinating
Date	02/04/2016
Summary	Shares an article of vaccine free where it is stated that the Netherlands is very close to obligatory vaccinating children.
Likes	3
Comments	1
General tone of the comments	Asks where it states that we are that far?
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 51

Topic	Discussion topic
Date	30/03/2016
Summary	Are there more people afraid whom are vaccinated against the measles that if the measles degree lowers, they will also get the measles? This is based on an earlier discussion she had with someone in the group.
Likes	0
Comments	22
General tone of the comments	Discussion, anti-vaccinator feel attacked and as this is a new method of vaccinators to pressure anti-vaccinators. And many conspiracy theories, that we want less people in the world etc.
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 52

Topic	Question
Date	02/04/2016
Summary	Does anyone has this book for sale?
Likes	2
Comments	7

General tone of the comments	People saying that it is definitely its money worth and when he gives a lecture.
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 53

Topic	Sharing an event
Date	01/04/2016
Summary	When you doubt about vaccinating, come to Door Frankema's lecture, the author of vaccine-free.
Likes	2
Comments	0
General tone of the comments	Not applicable
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Not applicable

Vaccinatietwijfelaars 54

Topic	A link to a survey
Date	31/03/2016
Summary	Link to a survey of vaccine free who does research on who get more infection diseases: vaccinated or not vaccinated children?
Likes	0
Comments	19
General tone of the comments	Discussion whether the approach of the research is credible
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Yes

Vaccinatietwijfelaars 55

Topic	Link to article
Date	31/03/2016
Summary	An article about why Wakefield should not be looked at, as now the case is, and why he is not a bad guy.
Likes	4
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 56

Topic	Sharing an article
Date	31/03/2016
Summary	Aluminium components which are part of vaccinations are very bad for your body
Likes	3
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No

2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 57

Topic	HPV vaccine question
Date	30/03/2016
Summary	She is looking for credible information about the HPV vaccine. She definitely is not going to give it to her daughter, but the mother of her stepdaughter wants to give it to her stepdaughter and now she is basically looking for information against the HPV vaccine.
Likes	0
Comments	12
General tone of the comments	People giving information about why the HPV vaccine is so bad. (obviously the poster already asked for this, and didn't want two sided comments)
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 58

Topic	Question for a book
Date	29/03/2016
Summary	She is looking for a book: vaccination the end of a myth, in order to learn more about vaccinations and whether to or no, vaccinate her child against BMR.
Likes	0
Comments	13
General tone of the comments	Discussion why she should or shouldn't read the book.
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 59

Topic	Shared article
Date	26/03/2016
Summary	Article about Robert de Niro, who supports the anti-vaccinators documentary, as his child is autistic.
Likes	3
Comments	20
General tone of the comments	Robert de Niro has withdrawn his earlier comment
High perceived credibility	Yes
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 60

Topic	Question, yes or no vaccination
Date	24/03/2016
Summary	I'm doubting whether to vaccinate my child or not, what was for you the argument to do this or not?
Likes	0
Comments	12
General tone of the comments	Sharing sources, got their information from NVKP

High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Not applicable

Vaccinatietwijfelaars 61

Topic	Question, why people made their choice
Date	23/03/2016
Summary	She is just new in the group and wonders on what information people based their choice.
Likes	1
Comments	9
General tone of the comments	People based their information on the website vaccine free and the Facebook page.
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	Not applicable

Vaccinatietwijfelaars 62

Topic	Sharing article
Date	25/03/2016
Summary	If your doctor insists vaccines are safe, make them sign this form.
Likes	3
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 63

Topic	Sharing an article
Date	25/03/2016
Summary	Effects of mercury on brain neuron degeneration and that this still can be found in vaccinations
Likes	0
Comments	4
General tone of the comments	Agreement and stating in which vaccinations these elements are in.
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 64

Topic	Sharing article
Date	25/03/2016
Summary	The faith of doctors who didn't want to be a part of the games of the pharmaceutical industry and are now dead.
Likes	0
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other

Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 65

Topic	Sharing an event
Date	25/03/2016
Summary	The truth about vaccinations symposium
Likes	0
Comments	0
General tone of the comments	Not applicable
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 66

Topic	Sharing an article
Date	24/03/2016
Summary	The truth about flu vaccinations for pregnant women and a child with autism.
Likes	1
Comments	5
General tone of the comments	Discussion about why this article is incorrect, and why that woman is posting it.
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 67

Topic	Sharing link
Date	21/03/2016
Summary	The RIVM thinks it is frustrating that people who got e.g. vaccinated for polio don't have any symptoms, because then they don't know that they are contagious
Likes	2
Comments	6
General tone of the comments	People are reacting mad because it is from a source of 1992.
High perceived credibility	No
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language
Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 68

Topic	Question
Date	24/03/2016
Summary	My child is not vaccinated, but now we want to travel outside Europe. Can he stay unvaccinated or should I vaccinate him?
Likes	1
Comments	6
General tone of the comments	People coming with their own experiences e.g. having travelled to Nepal with an unvaccinated child and nothing happened. And that she should do research on homeopathic means.
High perceived credibility	Not applicable
2 way communication dialogue	Yes, people respond to the post and each other
Accessible language	Highly accessible language

Pro-active stance	Yes
Good visible	Yes, when notifications are on
Highly transparent	No

Vaccinatietwijfelaars 69

XVI. Letters sent to the parents

Bijlagen:

- Oproepkaart(en)
- Brochure: Informatie over DKTP-prik

Datum November 2012
Onderwerp Laat uw kind inenten

Beste ouder(s), verzorger(s),

Het Rijksvaccinatieprogramma beschermt uw kind tegen ernstige infectieziekten. Rondom de 4^e verjaardag van uw kind, krijgt uw kind de DKTP-inenting aangeboden. Met deze inenting wordt de bescherming van uw kind tegen difterie, kinkhoest, tetanus en polio versterkt. In deze brief leest u waar uw kind de inenting krijgt en wat u mee moet nemen.

Waar moet u zijn?

De meeste kinderen krijgen de prik tijdens het laatste bezoek aan het consultatiebureau. Soms wordt de inenting door een andere organisatie verzorgd. **U ontvangt hiervoor een aparte uitnodiging van uw regionale organisatie voor de jeugdgezondheidszorg (JGZ).**

Heeft uw kind het laatste bezoek aan het consultatiebureau al gehad? Of bezoekt u het consultatiebureau niet? Maak dan zelf een afspraak bij een JGZ-organisatie bij u in de buurt.

Wat neemt u mee?

Bij deze brief krijgt u de oproepkaart(en) voor de inenting. Neem de oproepkaart(en) en het vaccinatiebewijs van uw kind mee. Dan kan de inenting geregistreerd worden.

Wat moet u weten?

In de brochure leest u meer over het Rijksvaccinatieprogramma. Bij elke nieuwe fase ontvangt u een uitnodiging voor inenting. Ook als u eerder hebt aangegeven niet deel te willen nemen. U bent niet verplicht om uw kind te laten inenten. Het is wel verstandig.

Twijfelt u aan de gezondheid van uw kind? Meld dit dan vóór de prik wordt gegeven aan de arts of verpleegkundige die de inenting geeft. Meld het ook als uw kind de afgelopen 3 maanden een medische behandeling heeft gehad.

Heeft u nog vragen?

U kunt ze stellen aan de arts of verpleegkundige die de inenting geeft of aan uw huisarts. Voor meer informatie kunt u kijken op www.rivm.nl/rijksvaccinatieprogramma. Daar vindt u ook de bijsluiters bij de vaccins die in het RVP worden toegediend. Op www.facebook.com/rvp.vaccinaties kunt u meepraten over het RVP.

Met vriendelijke groet,



J.A. van Vliet, arts
Manager Rijksvaccinatieprogramma

- Bijlage(n):
- Oproepkaart(en)

Datum november 2012

Onderwerp Herinnering uitnodiging vaccinatie

Beste ouder(s), verzorger(s),

Al eerder heeft u een uitnodiging ontvangen om uw kind te laten inenten. Volgens onze administratie heeft uw kind deze inenting(en) nog niet gekregen. Daarom ontvangt u deze herinnering. Ook ontvangt u hierbij nieuwe oproepkaart(en).

Is uw kind al ingeënt?

Scan of maak een foto van het ingevulde vaccinatiebewijs van uw kind en mail dit naar het regiokantoor. Wij kunnen dit dan in onze administratie verwerken.

U kunt ook een kopie van het ingevulde vaccinatiebewijs per post sturen naar het retouradres bovenaan deze brief.

Wat moet u doen?

Om uw kind te beschermen tegen ernstige infectieziekten kunt u uw kind laten inenten. Maak hiervoor een afspraak bij een organisatie voor de jeugdgezondheidszorg (JGZ) bij u in de buurt (consultatiebureau). Neem de oproepkaart(en) en het vaccinatiebewijs van uw kind mee. De inenting kan dan geregistreerd worden.

Wat moet u weten?

Inenten is belangrijk voor de gezondheid van uw kind. Infectieziekten kunnen namelijk ernstige gevolgen hebben. U bent niet verplicht om uw kind te laten inenten. Het is wel verstandig.

Twijfelt u aan de gezondheid van uw kind? Meld dit dan vóór de prik wordt gegeven aan de arts of verpleegkundige die de inenting geeft. Meld het ook als uw kind de afgelopen 3 maanden een medische behandeling heeft gehad.

Heeft u nog vragen?

U kunt ze stellen aan de arts of verpleegkundige die de inenting geeft of aan uw huisarts. Voor meer informatie kunt u kijken op www.rivm.nl/rijksvaccinatieprogramma. Daar vindt u ook de bijsluiters bij de vaccins die in het RVP worden toegediend.

Met vriendelijke groet,



J.A. van Vliet, arts

Manager Rijksvaccinatieprogramma

Bijlage(n):
Oproepkaart(en)

Datum: november 2012

Onderwerp **Laatste uitnodiging voor vaccinatie**

Beste ouder(s), verzorger(s),

Al eerder heeft u een herinnering ontvangen om uw kind te laten inenten. Volgens onze administratie heeft uw kind deze inenting(en) nog niet gekregen. Daarom ontvangt u deze laatste oproep. Ook ontvangt u hierbij de nieuwe oproepkaart(en).

Is uw kind al ingeënt?

Scan of maak een foto van het ingevulde vaccinatiebewijs van uw kind en mail dit naar het regiokantoor. Wij kunnen dit dan in onze administratie verwerken.

U kunt ook een kopie van het ingevulde vaccinatiebewijs per post sturen naar het retouradres bovenaan deze brief.

Wat moet u doen?

Om uw kind te beschermen tegen ernstige infectieziekten kunt u uw kind laten inenten. Maak hiervoor een afspraak bij een organisatie voor de jeugdgezondheidszorg (JGZ) bij u in de buurt (consultatiebureau). Neem de oproepkaart(en) en het vaccinatiebewijs van uw kind mee. De inenting kan dan alsnog gegeven worden.

Wat moet u weten?

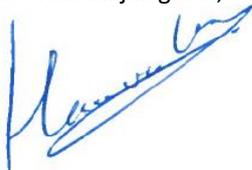
Inenten is belangrijk voor de gezondheid van uw kind. Deze infectieziekten kunnen namelijk ernstige gevolgen hebben. U bent niet verplicht om uw kind te laten inenten. Het is wel verstandig.

Twijfelt u aan de gezondheid van uw kind? Meld dit dan vóór de prik wordt gegeven aan de arts of verpleegkundige die de inenting geeft. Meld het ook als uw kind de afgelopen 3 maanden een medische behandeling heeft gehad.

Heeft u nog vragen?

U kunt ze stellen aan de arts of verpleegkundige die de inenting geeft of aan uw huisarts. Voor meer informatie kunt u kijken op www.rivm.nl/rijksvaccinatieprogramma. Daar vindt u ook de bijsluiters bij de vaccins die in het RVP worden toegediend.

Met vriendelijke groet,



J.A. van Vliet, arts
Manager Rijksvaccinatieprogramma

Datum

Onderwerp Informatie over het Rijksvaccinatieprogramma
Rondom de 4^e verjaardag

Beste ouder (s), verzorger(s),

Alle kinderen in Nederland krijgen door de overheid kosteloos vaccinaties aangeboden tegen ernstige infectieziekten. Ook met u hebben wij hiervoor al eerder contact gehad. U hebt toen aangegeven van dit aanbod geen (of gedeeltelijk geen) gebruik te willen maken. Wij hebben in ons systeem geregistreerd dat wij hiervoor geen uitnodigingen meer sturen.

Binnenkort zullen de uitnodigingen voor de vaccinaties van kinderen in de leeftijd van ongeveer 4 jaar verstuurd worden. Uw kind zou nu voor de volgende vaccinatie(s) in aanmerking kunnen komen: Als bij deze brief een oproepkaart aanwezig is, heeft u van die vaccinatie niet aangegeven geen gebruik te willen maken.

Mocht u van gedachte veranderd zijn en toch een uitnodiging willen ontvangen, dan kunt u contact met ons opnemen. Wij zorgen er dan voor dat u de benodigde oproepkaart(en) alsnog krijgt. Zo niet, dan hoeft u niets te doen.

Heeft u nog vragen?

Voor meer informatie kunt u kijken op www.rivm.nl/rijksvaccinatieprogramma. U kunt uw vragen ook stellen aan de arts van de JGZ-organisatie in uw regio.

Met vriendelijke groet,

Regiomanager
RIVM-DVP

Extra information

There are different letters sent to the parents and these differ per age. Because all letters are generally the same but only invite for a different vaccination, not all letters are included but only the different ones parents receive when their child is four years old.

Consult 1

Visitors: Father and mother with their two daughters

Doctor opens in an informal way; how are you doing? Do you have any questions for me? Doctor is sweet to the children and gives them a lot of attention. Doctor explains what she is doing and why she is doing it. Parents and doctor talk about the character of the children and the doctor compliments the parents. The children both get a vaccination. The doctor explains the parents about the process and the side-effects of the vaccinations. She jokes to the children and also explains things to the children. When it is time for the vaccinations the doctor explains why she now vaccinate in the arms and not the legs and which position is the best for the child. She does both vaccinations as fast as possible. Afterwards an informal conversation.

Consult 2

Visitors: Father and his son

Doctor opens informal and while she is talking to the father, the child is doing some games in order to test his development. Both are content about the development of the son and they talk about this. The doctor only talks about the food that it is important to stay on quality, however she reassures by telling that exemptions are of course ok. She asks nicely about the mother, as she didn't feel very good. Question are asked in a nice and open way, not judging. Then it is time for the vaccinations, the father was aware beforehand that the child would get vaccinations. The doctor explains the side-effects of the BMR vaccination and that fever is normal, however not over 38.5. Moreover the doctor emphasizes that if something weird occurs they can always notify it, as they are always very happy with feedback. After the vaccinations she advises the father to distract the child in order to stop crying.

Consult 3

Visitors: Mother with two children

The length of the smallest child (baby) seem to differ and the main emphasis lays on this. The mother tells that the baby cried a lot for the last two months, the doctor asks whether she had called to the doctor or came by an extra time, she encourages the mother for more feedback. The doctor asks the mother if she is following two sites and then starts about a new research about food for children. Doctor gives a lot of attention to the children. She compliments the baby: he is a small entrepreneur, he is so funny. She explains why the legs differ and that an echo can clarify more. However the doctor reassures the mother that she doesn't expect anything bad, it is important to eliminate the chance. The children don't have to be vaccinated this time, however the doctor asks if there were any troubles.

Consult 4

Visitors: Father and a mother with two sons

Doctor asked for clarity, you were here for the eyes right? Then she starts off with a conversation – with a casual tone- about the current home situation, and acknowledges the parents have had a lot to deal with. She explains why she does everything. In order to clarify what is wrong with the eyes of their sons, the doctor makes a little drawing so it is easier to understand. She explains that glasses now would be an investment for the future. Doctor gives advice about why their sons can better be treated in UMCG/Martini hospital. It is clear the doctor speaks more to the father than the mother, this is due to the fact that the mother is from Uganda and though she speaks Dutch, the father is native Dutch. Furthermore she tells the parents that if the follow-up doctor disagrees with her judgement of the eyes, they can give her a call.

Consult 5

Visitors: Father with his son and daughter

Doctor starts of informal: how are you. And says; Is Lieke as easy as Daan? Indicating that she remembers them and knows them. When the father talks about when the baby was ill, the doctor asks for clarification and continues on the topic. When the doctor checks the eyes of the baby, she asks for more information and explains why it can be she cannot see through well. Then she asks if the baby had any troubles of the vaccinations? The father says no, and the doctor gives the vaccinations again.

Consult 6

Visitors: Mother and daughter

Doctor starts with question about the fact that the daughter was born premature. She asks how the last period was for the mother and if she is ok now. It is an easy conversation. The mother however doesn't drink cow milk anymore, as she is convinced the daughter is lactose intolerant. The doctor becomes a bit stricter and asks clear questions whether the mother gets enough vitamins and explains that after six months she should test it again as it is often over by then. It is clear the mother has her own plan and does not necessarily listens to others. The mother tells that she wants to go to the chiropractor with her daughter and even though the doctor reacts sceptical and recommends a physiotherapist the mother pursues her standpoint. *The child is not yet vaccinated and the mother doesn't plan to do this.* The doctor asked on what this is based and the mother explains that she did research during her pregnancy and believes vaccines just don't work. The doctor asks where she gained this information from the mother explains that this is from the websites Vaccinvrij and the Nederlandse Vereniging van Kritisch Prikken, besides that she also gets a lot of information from her environment. Doctor explains: I respect your choices, however it is my duty to explain more about vaccinations as well. She tells that many sites exaggerate their evidence and that these sites are not bound by the same principle as the government: namely tell the truth. She talks about components of vaccinations which are named on the sites and tells that despite the fact the sound scary, these are body own materials. The mother explains she is afraid for piles in the body and thinks the odds her child gets ill are minimal. The doctor acknowledges the fact that odds are small right now, but this changes when the child will go to day care, and tells that even though it doesn't happen often, sometimes an unvaccinated child passes away. The mother tells she has made her choice already and thinks that a further discussion will be interesting but she won't change her mind. Also due to the improved medicine and better hygiene she thinks vaccinations are not necessary anymore. The doctor stops the discussion and says that it is ok for her, but makes clear that if the child gets ill the mother should always tell the doctor she is not vaccinated. And that she would like to talk to the mother again about this in six months. The doctor continues with the child and some standard tests.

- Extra note given by the doctor to me, after six months the stress period has passed and the mother might stand open for other advice)

Consult 7

Visitors: Foster mother, with two foster daughters.

The doctor and the mother talk about the status quo of the two girls. Both their teeth are bad and they talk about the further steps for this. Doctor asks questions for clarity on their situation and then makes decisions on how to continue with the girls. The doctor tries to make everything more clear and is looking for confirmation. No serious steps can be undertaken as the foster mother cannot yet make decisions for the children. Therefore the both of them cannot be vaccinated yet without permission of the biological mother, however if it was possible she would do it straight away. The doctor says that this is ok, and that she would like to see the girls another time anyway to get to know them a bit better and be able to recognize whether something is character or an effect of a trauma. The mother has some more questions about the physical health of the two girls and the mother checks everything immediately.

Consult 8

Visitors: Father and son

Doctor asks about home situation and it is obvious they know each other, or at least that the doctor is up to date. They talk about food and the doctor gives advice. Doctor is good aware about what is being said on the internet as she rebuts straight away some arguments which are generally given on the internet. When she asks about the extra help the family gets she asks it in a way which levels herself with him: Do you see each other that little or is it ok? When it is time for vaccinations she asks whether the child had problems after the previous vaccinations and when the dad says no, she gives the two other vaccinations.

Consult 9

Visitors: Mother and a daughter

The mother wants to talk about an alternative vaccination schedule. In their previous meeting the doctor gave her all the information leaflets of the vaccinations and the mother is well informed. The doctor asks her what the mother had in mind, the mother wants to vaccinate at least only after six months. They talk about the fact that this is ok as the mother will stay home until September anyways. They talk about the whooping cough and pneumococcal and that the risks for getting these diseases are the highest. The doctor emphasizes that it is important to always tell that the child is not vaccinated when she is ill. The doctor is well aware about what is being said on the internet. Moreover the doctor emphasizes that the vaccinations part of the RVP are the best researched vaccinations available. She explains that when the intervals between then vaccinations get longer it is in advantage of the antibody forming however the disease can get worse when a child gets vaccinated later. Doctor talks a lot and tells about all the risks of not doing vaccinations. But also tells that vaccinations as BRM don't have to be rushed, but the mother tells she doesn't want to do these vaccinations anyways. As according to the mother the disadvantages are bigger than the advantages, which is partly based on her own experiences. The doctor tells that not long ago there was an epidemic of the measles in the Netherlands, in order to make the mother aware her child can still get ill from a nasty disease. The doctor gives alternatives, for instance 3 BMR vaccinations are given to the child, however when only one would be given the child is still very good vaccinated. The doctor emphasizes that she finds vaccinations very important and that we can go into the future with an open mind and just see then. She closes the consult with that if the mother wants to talk about this another time she is more than welcome.

- Extra note given by the doctor to me: This mother was a very different type than the mother of consult 6, this mother seemed more open for influence. Therefore she didn't give the mother lots of space to talk but mainly told a lot herself in order for the mother to think about it.

Analysis of the consults

High perceived credibility	Yes, the doctor gives information applicable to ones' personal situation and of research based evidence and has according to multiple researches the highest credibility.
2 way communication dialogue	Yes. The doctor does not only inform, but also listens to the parents and explains things to the parents. However in some cases by intention she chooses to not to, this as can be reviewed in consult 8. Besides the two way communication dialogue during the consult, she also encourages parents to asks for more information or make a new appointment at the clinic whenever they want to and that they can always call.

Accessible language	Yes, highly accessible language. Everything what the doctor said was easy to understand, and when something was a bit more complicated she elaborated on it or explained it with a drawing. She didn't asks for a lot of confirmation from then parents whether they understood her or not, however their body language told enough.
Pro-active stance	Yes, she started herself about some counter arguments the parents might have and gave information about new researches. She showed she was up-to-date with the current information available in many different areas and gave a lot of information. Also by saying e.g. I would like to talk to you again in six months she takes a pro-active stance and does not necessarily leave it by what it is, at this moment. Moreover she also helps the parents with the continuous steps.
Good visible	Not applicable
Highly transparent	Yes, highly transparent. She told exactly what her position was in some situations and where the parents can find more information. She was happy to provide more information as well. Also about some procedures she was surprisingly open and told exactly how it went and what is better to do.
Prevailing opinion leadership	Many parents listened to the doctor and therefore there can be said that the doctor is definitely very important. However it is difficult to know what is going on in one's environment as for instance as in consult 6 can be reviewed, the mother is influenced by her environment and not by the doctor.
Spiral of silence	Not applicable
Recent developments	The doctor was good aware of the recent developments and also used them, especially in consult 6 and 8 where the mothers weren't really open for vaccinations. However the recent developments as for instance a measles outburst, did not seem to matter t much for them. They tended more towards; well if the epidemic just has been, everybody is now better vaccinated and the odds my child gets it is lower. The doctor was up to date about the news, but also about new researches and gave the information of this new researches to the parents.

Extra information

The doctor gives a lot of attention to the children and for her, the children are here client not the parents. This means that sometimes she has to say something which the parents won't like however it is better for the child to say it. The communication was very honest and open, without getting judgemental. Even though as for instance in consult 6, the doctor didn't agree with the mother stance, she remained unbiased and knew when to end the conversation. I asked her at the end of the day why she didn't inform every parent of the side effects. She told me that she always asks; did your child had problems with the last BMR vaccination? When the parents say no, she doesn't continue further on then side-effects chances are nihil that when they didn't had problems the first time, it will occur the second time. And at last the doctor said: I repeat myself a lot, however intentionally. Because research pointed out that parents with children tend to not hear and forget a lot.