



share and move to face nasty bugs

# MOBILIZATION AND MUTUAL LEARNING D5.1 SOCIAL MEDIA MOBILIZATION REPORT

ASSET Project • Grant Agreement N°612236

## ASSET

Action plan on SiS related issues in Epidemics And Total Pandemics

7<sup>th</sup> RTD framework programme

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Responsible partner: **Zadig**

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### D5.1 Social Media Mobilization Report

Task: 5.1

Leader: Zadig – Other contributors: ISS, PROLEPSIS, EIWH

### History of changes:

Vn	Status	Date	Organisation / Person responsible	Reason for Change
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## EXECUTIVE SUMMARY

The present report contributes to the accomplishment of a major objective of the ASSET project, which is the establishment of baseline knowledge on social media discussions about pandemics and related topics, within the wider scope of Work Package 5 (WP5: Mobilization and Mutual Learning). The principal focus of this report is to provide an overview and discuss relevant data on social media accounts of international health organizations, vaccine companies and main opposers.

The first part of the report presents data on the social media accounts of four public health institutions (World Health Organization (WHO), European World Health Organization (EURO WHO), European Centre for Disease Prevention and Control (ECDC) and Centers for Disease Control and Prevention (CDC)), four main vaccine and antiviral drug manufactures (Pfizer, GSK, Merck and Sanofi Pasteur) and two of their main opposers (Dr Tenpenny and Age of autism). More specifically, we analysed data on their social media presence and engagement.

In particular, our analysis shows that the WHO is the international health agency with more engagement on social media. Infact they have over 4.1M follower on Twitter and over 3.4M fan on Facebook (they're the only ones to overcome the million fan on social media) and their total engagement reached over 200,000 during November 2017 (222,866 on Twitter and 294,882 on Facebook).

Regarding vaccines industries, we noticed that Pfizer, Merck and Sanofi websites have some issues with links to their social media accounts, which are (often not updated or unavailable. This should suggest that there is a lack of communication between different webmasters and social media managers, and that social media activities are more important than website maintenance. At the opposite, all GSK's national websites work very well and we found few social media account not reported in the main website. Moreover, we noticed that each country has a different number of social media accounts, with different strategies and different numbers of posts/tweets.

As a last part of our analytics work, we also studied some accounts against vaccines and vaccintions. We found that they all reach the highest level of engagment on Facebook and we think that this is related with the different length of texts between Facebook and Twitter. Infact, they are more likely to write long texts to argue about the damage of the vaccines and to display touching stories about alleged damage caused by vaccines in babies.

In the second and third part we analysed social media conversations and we learned some useful tips about social media rules that we collected in the final considerations.



# 1. EXPLORE THE SOCIAL REACH OF PANDEMIC

## 1.1 Presence and social reach of national, European, and international agencies directly involved in pandemic preparedness

We analysed data of four agencies involved in pandemic preparedness: one international (World Health Organization - WHO), one Regional (World Health Organization Regional Office for Europe - Euro WHO), one European (European Centre for Disease Prevention and Control - ECDC) and one national (Centers for Diseases Control and Prevention - CDC).

### WHO

WHO has four social media buttons on the home page: Facebook, Twitter, Instagram, GooglePlus and YouTube.

Social Media	Followers/Fan
YouTube	56,224
Twitter	Over 4.1M
Facebook	Over 3.4M
GooglePlus	Over 1M
Instagram	465K

WHO joined YouTube on October 25, 2005, and Twitter on April 2008<sup>1</sup>.

We analysed data on social media reach during two periods: December 2016-January 2017; October-November 2017:

- Twitter

	December 2016	January 2017	October 2017	November 2017
Tweet number	206	180	273	422

<sup>1</sup> Twitter and YouTube are the only social media that show the birth date of an account.



Total engagement (total number of reply, retweets and favorites)	72,257	54,294	137,981	222,866
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- Facebook

	December 2016	January 2017	October 2017	November 2017
Post number	13	7	56	96
Total engagement (total monthly interactions on the single post page – likes, comments and share)	32,666	19,271	197,323	294,882

### Euro WHO

The Euro WHO home page hosts direct links to Twitter, Facebook and YouTube accounts but the institution has two more social media profiles, on Instagram and GooglePlus.

Social Media	Followers/Fan
YouTube	Over 1.4K
Twitter	Over 52.2K
Facebook	Over 128K
GooglePlus*	Over 2,600
Instagram*	Over 2,500

\*not reported in the website

Euro WHO joined Twitter on March 2010; YouTube on January 31, 2011.



GooglePlus account is no longer update (last update March 2013)

We analysed data on social media reach during two periods: December 2016-January 2017; October-November 2017:

- Twitter

	December 2016	January 2017	October 2017	November 2017
Tweet number	497	96	69	80
Total engagement (total number of reply, retweets and favorites)	3,777	1,128	4,703	4,863

- Facebook

	December 2016	January 2017	October 2017	November 2017
Post number	15	13	29	25
Total engagement (total monthly interactions on the single post page – likes, comments and share)	2,973	616	1,479	1,117

### ECDC

On its home page, ECDC has several social media buttons (Facebook, Twitter, YouTube, LinkedIn, Vimeo and SlideShare) and a link to a “Social media” page, which hosts a collection of all the accounts and a general netiquette.

Social Media	Followers/Fan
Facebook	Over 4,000
Twitter	Over 19.7K



YouTube	Over 375
Linkedin	Over 6,300
Vimeo	Over 20
SlideShare	Over 45

Social media accounts reported in the ECDC Social media page:

Social Media	Followers/Fan
Twitter - @ECDC_EU*	Over 19.7K
Twitter - @ECDC_Outbreaks	Over 3,500
Twitter - @ECDC_Flu	Over 2,700
Twitter - @ECDC_HIVAIDS	Over 1,190
Twitter - @ECDC_VPD	Over 2,560
Twitter - @ECDC_Tuberculosis	Over 1,650
Facebook - ECDC*	Over 4,000
Linkedin - ECDC*	Over 6,300
Pinterest - ECDC	Over 25
SlideShare - ECDC*	Over 45
Vimeo - ECDC*	Over 20
YouTube - ECDC*	Over 375

\*Reported also on the home page.

Euro WHO joined YouTube on June 4, 2010. The first account that ECDC has opened on Twitter is @ECDC\_VPN (Vaccine Preventable Diseases, September 2010) followed by: @ECDC\_EU (October 2010); ECDC\_TB (March 2013); ECDC\_Flu (April 2013); ECDC\_HIVAIDS (November 2013); ECDC\_Outbreaks (August 2014).

ECDC has two more social media account on Twitter, not reported on the website: @ESCAIDE (over 500 followers since January 2015) and @ECDCPHT (Public Health Training – over 1,000 followers since April 2011).





We analysed data on social media reach during two periods: December 2016-January 2017; October-November 2017:

- Twitter

	December 2016	January 2017	October 2017	November 2017
Tweet number	20	7	2	8
Total engagement (total number of reply, retweets and favorites)	343	294	40	226

- Facebook

	December 2016	January 2017	October 2017	November 2017
Post number	18	2	8	7
Total engagement (total monthly interactions on the single post page – likes, comments and share)	315	138	378	179

### CDC

CDC has four social media button on its home page: Facebook, Twitter, YouTube and Instagram.

Social Media	Follower/Fan
Facebook	Over 722K
Twitter	Over 879K
YouTube	Over 57K
Instagram	Over 56K



CDC joined YouTube on April 19 2007 and Twitter on May 2010.

CDC has 20 other Twitter verified accounts that are not reported on the website:

Account	Followers	Tweets	Date of birth
CDC Hepatitis	Over 34.5K	Over 14.2K	May 2009
CDC Injury Center	Over 17.2K	Over 8,100	January 2011
CDC HIV/AIDS	Over 37.4K	Over 4,300	May 2010
CDC_NCBDDD <sup>†</sup>	Over 6,300	Over 8,000	January 2012
CDC Kenya	Over 7,800	Over 2,100	January 2012
CDC NPIN <sup>o</sup>	Over 27.1K	Over 22.4K	June 2009
CDC TB	Over 3,300	Over 2,000	April 2015
CDC Global Health	Over 124K	Over 14.9K	August 2011
CDC Flu	Over 657K	Over 4,400	October 2008
CDC Environment	Over 19.4K	Over 8,700	April 2009
CDC_eHealth	Over 665K	Over 6,100	July 2008
CDC Foundation	Over 61K	Over 5,900	May 2010
CDC NCEZID <sup>§</sup>	Over 8,000	Over 9,100	March 2013
CDC Travel Health	Over 24.3K	Over 4,000	August 2010
CDC STD	Over 35.8K	Over 69.4K	March 2010
CDC Emergency	Over 1.8M	Over 7,200	January 2010
CDC Tobacco Free	Over 31K	Over 5,600	April 2010
CDC Namibia	Over 1,700	Over 600	September 2012
CDC en Español	Over 40.9K	Over 3,100	November 2010



MMWR <sup>#</sup>	Over 25.7K	Over 3,500	February 2010
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\* Twitter description: CDC's Center protecting those most vulnerable to health risks: babies, children, people with blood disorders, and people living with disabilities.

° Twitter description: Connecting HIV/AIDS, Hepatitis, STD, and TB Prevention Partners

§ Twitter description: NCEZID works to protect people from emerging and zoonotic infectious diseases, from anthrax to Zika.

# Twitter description: MMWR is CDC's primary vehicle for scientific publication of timely, authoritative, and useful public health information and recommendations.

CDC has other Facebook verified accounts that are not reported on the website:

Account	Fan
CDC Global	Over 63K
CDC Travelers' Health	Over 22K
CDC HIV	Over 26K
CDC en Español	Over 92K

We analysed data on social media reach during two periods: December 2016-January 2017; October-November 2017:

- Twitter

	December 2016	January 2017	October 2017	November 2017
Tweet number	128	184	115	109
Total engagement (total number of reply, retweets and favorites)	7,564	8,500	12,633	11,857

- Facebook

	December 2016	January 2017	October 2017	November 2017
Post number	61	64	113	97



Total engagement (total monthly interactions on the single post page – likes, comments and share)	37,800	43,762	45,618	46,832
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## 1.2 Data on the social reach of the main vaccine and antiviral drug manufacturers, and their social marketing strategies

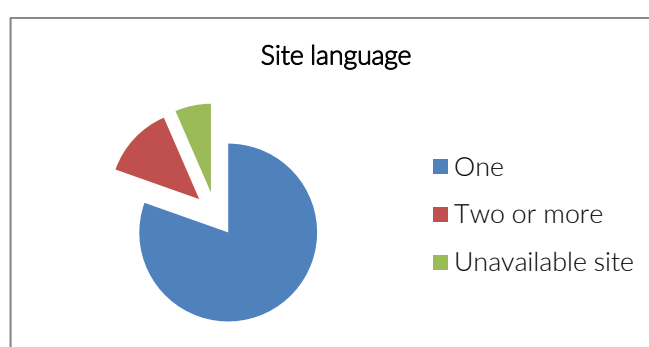
In order to find out the main vaccine manufacturers, we run a research about the global vaccine revenues. Data collected in 2013<sup>2</sup> reveal that the five biggest companies in terms of revenues were Merck, Sanofi, Pfizer, GSK and Novartis (Novartis stepped back from vaccines in 2014, trading away the bulk of its vaccines portfolio for GlaxoSmithKline's oncology unit and sealing its exit from the vaccine space by finalizing the sale of its flu vaccines unit to CSL). According to the Financial Times<sup>3</sup>, in 2016, Pfizer, GlaxoSmithKline, Sanofi, and Merck reported stronger sales growth in vaccines than in pharmaceuticals.

For each one of these companies we collected data from their websites (corporate images) and from their social media accounts (numbers and national distributions).

### 1.2.1 Pfizer

At first, we analysed their corporate identity by studying their national websites<sup>4</sup> and their similarity with the company main page<sup>5</sup>. In the page "Pfizer Global Sites" there are 46 national websites:

- 3 out of 46 websites were unavailable
- 6 out of 43 websites are similar to Pfizer.com
- 6 out of 43 used two or more languages



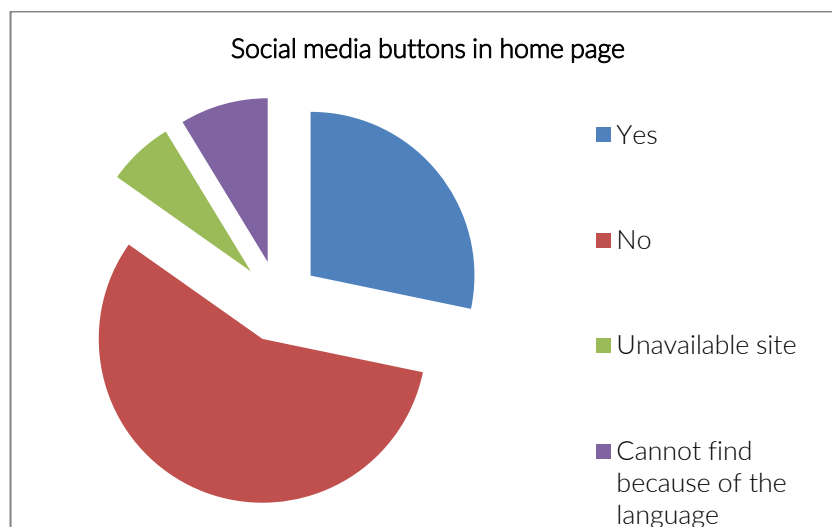
- 26 out of 43 have no social media buttons on their home page (we could not run the investigations on four other websites because of the language – Israel, Japan, Korea and Taiwan):

<sup>2</sup> <http://www.fiercepharma.com/special-report/top-5-vaccine-makers-by-2014-revenue>

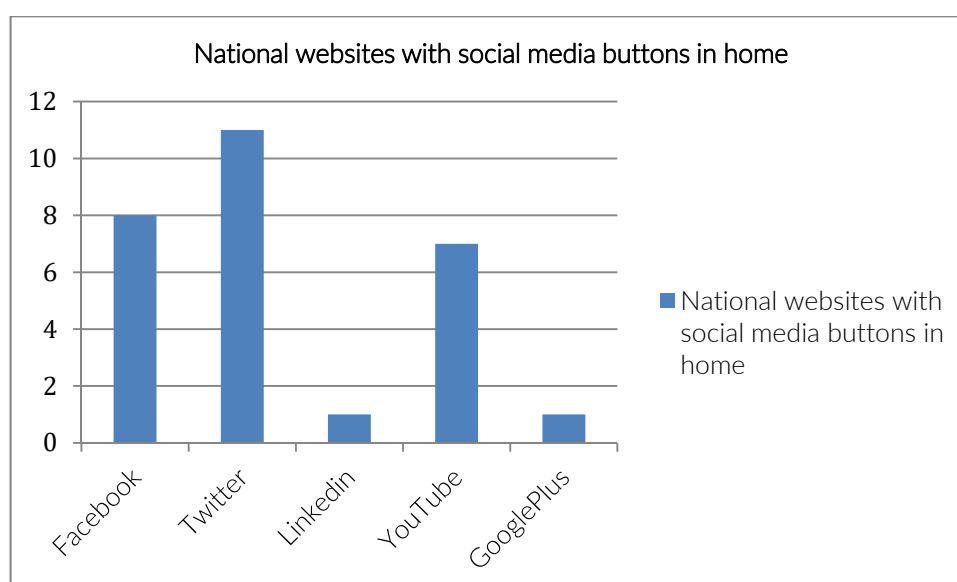
<sup>3</sup> <https://www.ft.com/content/93374f4a-e538-11e5-a09b-1f8b0d268c39>

<sup>4</sup> [http://www.pfizer.com/general/global\\_sites](http://www.pfizer.com/general/global_sites)

<sup>5</sup> [www.pfizer.com](http://www.pfizer.com)



- Social media buttons on the home pages of national websites:



The second part of the investigation was focused on social media accounts.

We analysed social media accounts on the home page of Pfizer.com (last check: June, 2 2017):

Social Media	Name of the account	Follower/Fan	Tweet/Post number	Views	Date of registration
Twitter	Pfizer	205,000	6,274		July 2009
Facebook	Pfizer	269,852			



Linkedin	Pfizer	1,517,949			
Instagram	PfizerInc	4,451	130		
Youtube	PfizerNews	10,275		3,036,986	July 15, 2009

Then we analysed the page “Pfizer in social media”<sup>6</sup> (last check: June, 2 2017), finding some unavailable accounts.

Social Media	Name of the account	Follower/Fan	Tweet/Post number	Views	Date of registration
Youtube	PfizerNews	10,275		3,036,986	July 15, 2009
	PfizerMexico	472		2,133,516	July 7, 2011
	PfizerUK			5,829,641	December 10, 2008
	PfizerPortugal	unavailable			
	PfizerEspana	555		4,507,190	April 21, 2010
	PfizerRussia	1,062		11,011,492	August 20, 2012
	PfizerBelgium	346		4,922,876	March 2, 2011
	PfizerBrazil	no information			
	PfizerTurkiye	144		640,499	March 20, 2010
	PfizerColombia	19,194		11,216,663	July 14, 2010

<sup>6</sup> [http://www.pfizer.com/news/social\\_media/social\\_media](http://www.pfizer.com/news/social_media/social_media)



	PfizerNorge	267		1,506,439	June 30, 2011
	PfizerSverige	237		1,271,195	October 3, 2012
Facebook	Pfizer	269,852			
	PfizerTurkey	106,307			
	PfizerKariyer (Finland)	unavailable			
	PfizerCanada	13			
	PfizerRussia	unavailable			
	PfizerSweden	unavailable			
Twitter/Weibo	PfizerNews	10,900	639		March 2012
	PfizerAustria	1,552	998		June 2010
	PfizerDeutschland	2,597	2,099		October 2010
	PfizerFrance	3,877	616		January 2011
	PfizerMexico	unavailable			
	PfizerEspana	17,000	6,430		March 2010
	PfizerTurkey	12,000	1,515		March 2010
	PfizerBelgium	1,032	520		March 2011
	PfizerCanada	2,538	4,541		September 2013
Slideshare		6,588	15		
Linkedin		1,517,949			

After that, we looked for social media accounts not reported in the Pfizer main website:

- General accounts



Social Media	Name of the account	Follower/Fan	Tweet/Post number	Views	Date of registration
Twitter	PfizerCareers	1,486	2,058		December 2013
	PfizerGrants	323	105		April 2014
	FundacionPfizer	2,945	2,399		September 2010
	pfizercareersmy	31	1		January 2013
Facebook	PfizerPharmaceutical	31,105			
	PfizerCritica	320			
	PfizerNutrition	144			
YouTube	Pfizer Consumer Healthcare	204		1,369,151	May 19, 2015
	Pfizer - Topic	31			December 23, 2013
	Laboratório Teuto Pfizer	245		53,715	February 10, 2014

- National accounts:

Social Media	Name of the account	Follower/Fan	Tweet/Post number	Views	Date of registration
Twitter	PfizerlifeUK	771	532		March 2012
	Pfizer_Ireland	1,156	896		September 2014
	PfizerBr	426	1,210		August 2012
Facebook	Brasile	33,787			
	Finlandia	1,782			
	Egypt	7,586			
	Russia	623			
	India limited	6,574			
	Maroc	193			
	Colombia	12,145			
	Ireland	3,467			
	Türkiye	106,311			





	Danmark	984			
	Belgio				
	Belgique Luxemberg	1,263			
	Mexico	11,195			
	Norge	8,079			
	Canada	13,117			
	PfizerProChile	3,484			
	Pfizer Thailand & Vietnam Careers	1,075			
YouTube	Pfizer Ireland				February 17, 2015
	Pfizer France	165		237,952	November 7, 2009
	Pfizer Europe	151			September 15, 2009
	Pfizer Centroamérica y Caribe				March 17, 2016
	Pfizer Deutschland	610		5,038,981	August 24, 2015
	Pfizer Thailand	1,149		4,684,492	October 29, 2014
	Pfizer Austria	29		54,538	November 30, 2016
	Pfizer Portugal	473		2,464,824	October 11, 2011
	Pfizer Brasil	393		1,090,091	September 6, 2012
	Pfizer Nederland	41		676,893	August 17, 2016

We analysed data on social media reach during two periods: December 2016-January 2017; October-November 2017:

- Twitter

	December 2016	January 2017	October 2017	November 2017
Tweet number	0	0	105	86



Total engagement (total number of reply, retweets and favorites)	0	0	7,952	2,608
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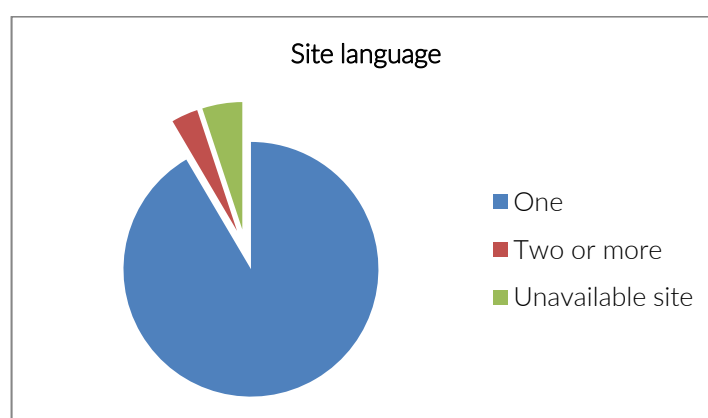
- Facebook

	December 2016	January 2017	October 2017	November 2017
Post number	50	39	72	68
Total engagement (total monthly interactions on the single post page – likes, comments and share)	4,838	9,045	11,850	7,322

### 1.2.2 Merck

At first, we analysed their corporate identity by studying their national websites<sup>7</sup>. In the page “Worldwide contact information” of MSD’s website<sup>8</sup> there are 59 national websites:

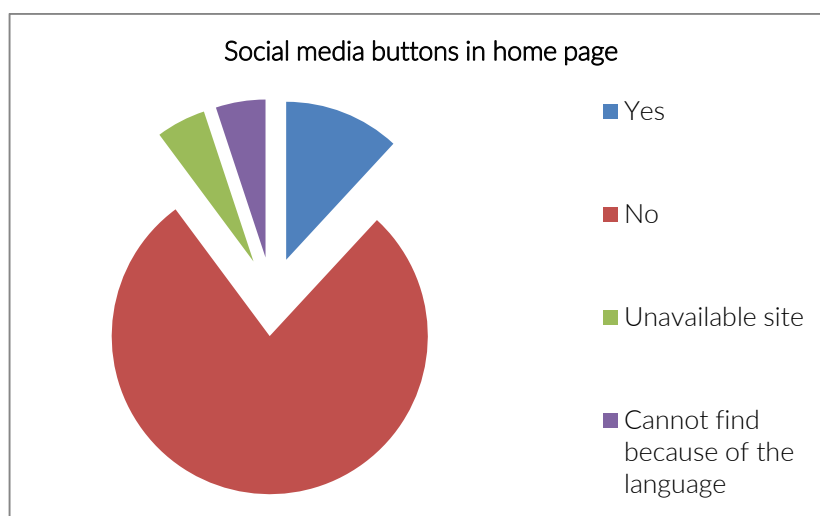
- 3 out of 59 websites were unavailable
- 2 out of 59 used two or more languages



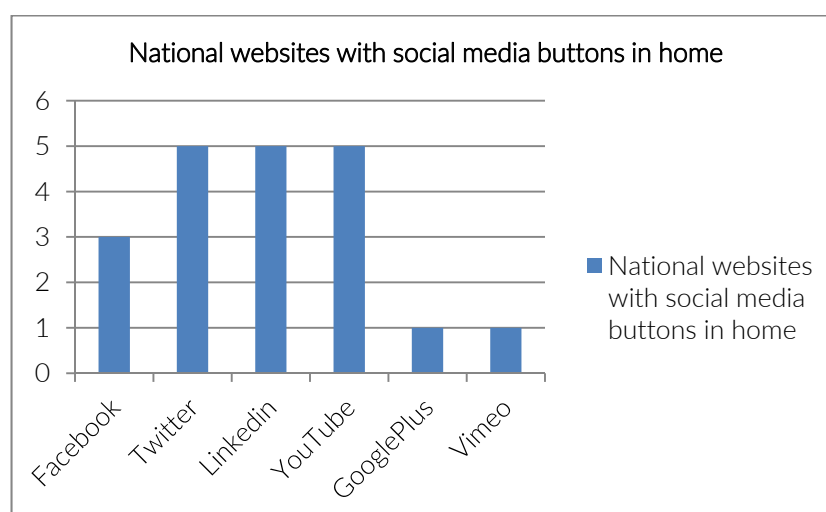
- 46 out of 59 have no social media buttons on their home page (we could not run the investigations on three other websites because of the language – China, South Korea and Taiwan):

<sup>7</sup> <http://www.msd.com/contact/contacts.html>

<sup>8</sup> <http://www.msd.com/index.html>



- Social media buttons on the home pages of national websites:



The second part of the investigation was focused on social media accounts.

We analysed social media accounts on the home page of Merckgroup.com and Merck.com (last check: October, 19 2017).

MerckGroup.com:

Social Media	Name of the account	Follower/Fan	Tweet/Post number	Views	Date of registration
Facebook	Merckgroup	60,262			
YouTube	Merck			3,515,328	October 12 2011



Twitter	Merckgroup (@merckgroup)	8,815	3,618		August 2010
Linkedin	Merck Group	166,335			

Merck.com:

Social Media	Name of the account	Follower/Fan	Tweet/Post number	Views	Date of registration
Facebook	Merck	81,885			
Twitter	Merck (@merck)	146K	6,172		April 2009
Linkedin	Merck	642,477			
Instagram	Merck	2,284	53		

Then we analysed the page “Social Media”<sup>9</sup> (last check: October, 19 2017), finding some unavailable accounts.

Social Media	Name of the account	Follower/Fan	Tweet/Post number	Views	Date of registration
Twitter	MSDBelgium	442	303		July 2012
	MSDFrance	2,597	1,405		January 2015
	msd_deutschland	1,222	1,653		July 2015
	MSDGreece	1,632	227		January 2017
	MSDNederland	3,096	1,849		May 2012
YouTube	msdbelgium	Unavailable			
	MSD France	358	55	80,387	August 8, 2014

<sup>9</sup> <http://www.mrknewsroom.com/#SocialMedia>



	MSDDeutschland	564	74	519,000	June 15, 2011
	MSD K.K.	37	23	24,407	September 28, 2015
	Msdbnl	78		27,854	July 2, 2010
	msdbelgium	2	50		
Facebook	MSDinBelgium	Unavailable			
	Msdinireland	Unavailable			
	D株式会社	11,382			
Google Plus	msdbelgium				
Linkedin	MSD-France	1,739			
	MSD Sharp & Dohme GmbH	12,206			
	MSD	160,547			
	msd-netherlands	6,131			
	msd-belgium	3,711			

After that, we looked for social media accounts not reported on the Merck main website:

- General accounts

Social Media	Name of the account	Follower/Fan	Tweet/Post number	Views	Date of registration
Facebook	Merck	81,884			
	merckcareers	13,022			
	Merck.lifescience	5,821			
	merckengage	160,531			
	MerckMilliporeBioscience	38,701			



	Merck Capacity Advancements Program	80,078			
	The merck veterinary manual	359,647			
	Merck Manual for Pet Health	45,964			
	merck animal health	42,745			
	Premio letterario Merck	434			
	Merck life science e performance materials	6,168			
	Merck Millipore	488			
	Merck Manual professional	354,649			
	Merck cancer control program	118,841			
	Merck foundation	17,961			
	merck more than a mother	96,958			
	Merck ventures	45			
	Merck Africa Research Summit	41,582			
	Merck for Africa	145,785			
	Merck manual consumer	134,503			
	MerckEngage	160,532			
	Millipore Sigma	3,684			
	Merck Millipore Process Solutions	11			
	Merck life science	281			
	Sigma-Aldrich	19,198			



	Corporation				
	MilliporeSigma	3,684			
YouTube	M - The Explorer Magazine	251	83	73,809	June, 21 2010
	M - The Explorer Magazine	55	54	14,207	July, 25 2013
	M - Das Entdeckermagazin	242	84	119,911	June, 25 2010
	Merck	1,303	135	142,893	March, 1 2006
	Merck Process Solutions	458	133	106,467	April, 12 2011
	Merck Manuals	2,247	57	479,068	October, 23 2014
	Merck Africa	15	301	1,331	January, 12 2016
	Lab water Merck Millipore-Water Purification		16	7,469	
	Merck Capacity Advacement Program	38	318	45,509	July, 11 2015
	Merck more than a mother	125	295		June, 20 2015
	Merck Careers	61	14		
	Merck bkk	4	2		
	Merck Spittal	1	1		
	Merck Cancer Control Program MCCP	16	243	3.258	July, 8 2015
	Merck Foundation	38	62	1120	March, 20 2017



	A woman is more than a mother - Merck KGaA	1	36	280	February, 29 2016
	Merck Centroatamerica	51	3		
Twitter	merck_de	1,766	2,148		March 2013
	EMDGroup	1,742	1,569		December 2012
	MerckforMothers	22.6K	3,359		October 2014
	USMerckProducts	7954	132		July 2014
	MerckEngage	19.9K	583		May 2014
	Merckff				September 2011
	MerckAH	12.8K	1,517		April 2011
	MerckAndMothers	20.7K	2,986		June 2015
	Merck_lifesci	2,746	1,281		June 2010
	MerckCAP	13.5K	1,867		November 2015
	Merck_MCCP	16.3K	1,764		July 2015
	EMDSerono	8,582	1,190		May 2012
	MerckManualHome	20.3K	5,032		February 2012
	MerckManualPro	25.5K	6,159		January 2012
	MerckVetManual	13.7K	4,943		February 2012
	MerckManualPet	5,876	2,752		February 2012
	MerckIMInspired	4,911	13.9K		
	MerckQuimicaMX	63	28		





	Merckff	390	2,910		
	Merck_MARS	9,643	1,714		July 2015
	MerckHealthcare	1,728	407		
	MerckFoundation	3,411	437		March 2017
	Merck_MARS	9,643	1,714		July 2015

- National accounts:

Social Media	Name of the account	Follower/Fan	Tweet/Post number	Views	Date of registration
Facebook	MerckinIndia	90,674			
	MerckIndonesia	268			
	Merck Egypt Careers	12,756			
	Merck Millipore Magyarorszag	115			
	MerckDeutschland	7,850			
	Merck Vietnam	202			
	Merck Serono Pakistan	3,316			
	Merck Brazil	17,428			
	Merck Malaysia: Life Science	1,112			
	Merck Filial Perù	11,210			
	Merck filial Chile	225			
	Merck Taiwan	8,851			
	Merck Life Science Singapore	249			
	Merck PH	1,256			
	Merck Thailand: Life	1,674			



	Science				
	Merck Millipore Bioscience Thailand	731			
	Merck Life Science Mexico	268			
	Merck KGaA & Co., Werk Spittal	644			
	Merck Vietnam Life Science	114			
	Merck Sdn Bhd	46			
	Merck Nepal: Life Science	0			
	Merck in Myanmar	230			
	Merck Millipore Bioscience India	256			
	<b>メルクライフサイエンス-</b> Merck	2,189			
YouTube	Merck KGaA Darmstadt Germany	0	25	4,294	March, 19 2014
	Merck France	42	22	7,905	August, 19 2014
	Merck Italia	181	115	60,868	November, 25 2015
	Merck in Canada	215	37	46,975	August, 27 2015
	Merck Taiwan	239	77	534,335	November, 20 2014
	Merck India	8	3		
	Merck Thailand: Life Science	1	5		
Twitter	merck_fr	1,645	1,035		June 2015



	MerckAfrica	17.4K	1,808		January 2016
	MerckIndia	7,040	635		October 2015
	MerckCanada	1,185	349		June 2016
	Merck_CH	1,275	584		January 2016
	MerckMexico	94	40		November 2013

We analysed data on social media reach during two periods: December 2016-January 2017; October-November 2017:

- Twitter

	December 2016	January 2017	October 2017	November 2017
Tweet number	43	45	53	62
Total engagement (total number of reply, retweets and favorites)	1,482	1,658	4,272	3,897

- Facebook1

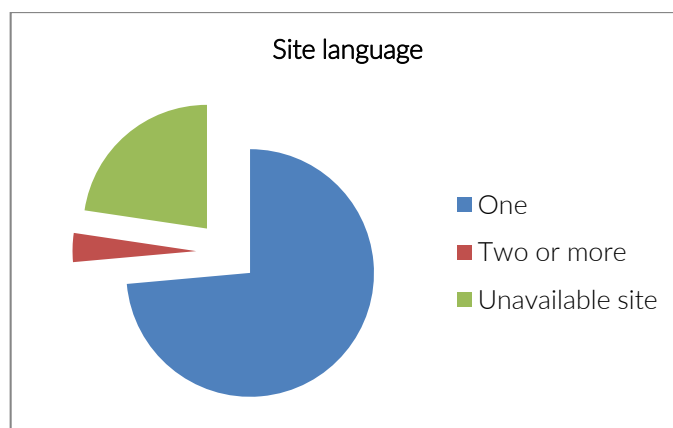
	December 2016	January 2017	October 2017	November 2017
Post number	12	16	17	16
Total engagement (total monthly interactions on the single post page - likes, comments and share)	5,793	2,661	2,521	56,605



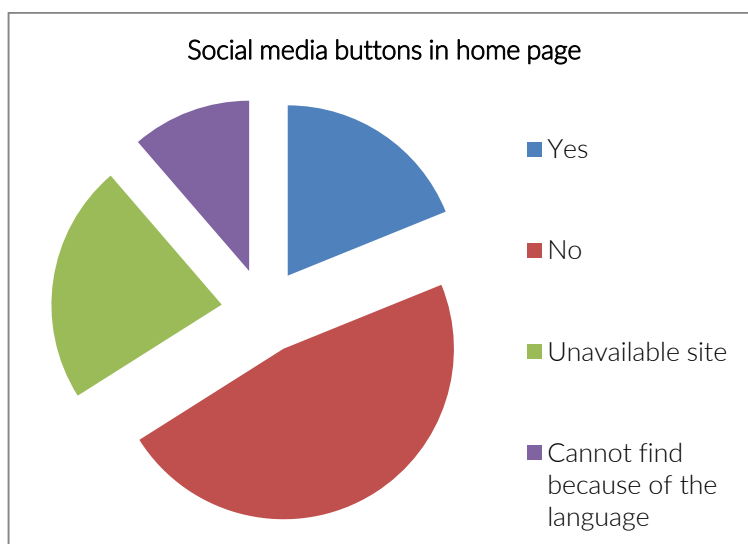
### 1.2.3 Sanofi Pasteur

At first, we analysed their corporate identity by studying their national websites<sup>10</sup>. In the page “Corporate websites” there are 53 national websites:

- 12 out of 53 websites were unavailable
- 2 out of 53 used two or more languages

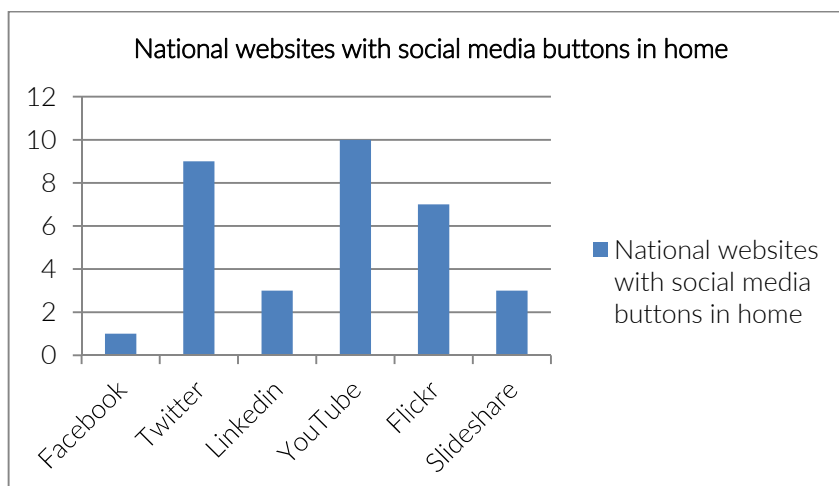


- 25 out of 43 have no social media buttons on their home page (we could not run the investigations on six other websites because of the language – China, Japan, Korea, Russia, Taiwan and Thailand):



- Social media buttons on the home pages of national websites:

<sup>10</sup> [http://www.sanofipasteur.com/en/about\\_us/corporate\\_websites/default.aspx](http://www.sanofipasteur.com/en/about_us/corporate_websites/default.aspx)



The second part of the investigation was focused on social media accounts.

We analysed social media accounts on the home page of Sanofipasteur.com (last check: October, 12 2017):

Social Media	Name of the account	Follower/Fan	Tweet/Post number	Views	Date of registration
Twitter	Sanofipasteur	46.5K	4,015		June 2009
Flickr	Sanofi-Pasteur	116	1,204		2010
Youtube	SanofiPasteurTV	1,013		1,421,849	August, 19 2008

SanofiPasteur’s main website does not have a page focused on social media account, so we searched all the account reported on each national website.

Social Media	Name of the account	Follower/Fan	Tweet/Post number	Views	Date of registration
Twitter – Argentina	SanofiPasteur	46.5K	4,015		
Twitter – Belgium	Sanofi	96.3K	4,186		
Twitter - Canada	SanofiCanada	2,864	6,899		



Twitter - Paraguay	SanofiPasteur	46.5K	4,015		
Twitter - Poland	SanofiPasteur	46.5K	4,015		
Twitter - Netherlands	Sanofi	96.3K	4,186		
Twitter - UK	SanofiUk	211	103		
Twitter - UK	Sanofi	96.3K	4,186		
Twitter - Uruguay	SanofiPasteur	46.5K	4,015		
Facebook - Canada	SanofiPasteurCanada100	652			
Linkedin - Belgium	Sanofi-Belgium	903			
Linkedin - Netherlands	Sanofi Netherlands	545			
Linkedin - UK	Sanofi	876,992			
YouTube - Argentina	SanofiPasteurTV	1,013			
YouTube - Belgium	SanofiTVen	8,397			
YouTube - Canada	SanofiPasteurCanada	74			
YouTube - India	SanofiTVen	8,397			
YouTube - Paraguay	SanofiPasteurTV	1,013			
YouTube - Poland	SanofiPasteurTV	1,013			



YouTube - Netherlands	SanofiTVen	8,397			
YouTube - Turkey	The link doesn't work				
YouTube - UK	SanofiTVen	8,397			
YouTube - Uruguay	SanofiPasteurTV	1,013			
Flickr - Argentina	Sanofi-Pasteur	116	1,204		
Flickr - Belgium	Sanofi	23	333		
Flickr - Paraguay	Sanofi-Pasteur	116	1,204		
Flickr - Poland	Sanofi-Pasteur	116	1,204		
Flickr - Netherlands	Sanofi	23	333		
Flickr - UK	Sanofi	23	333		
Flickr - Uruguay	Sanofi-Pasteur	116	1,204		
Slideshare - Belgium	Sanofi	168	87		
Slideshare - Netherlands	Sanofi	168	87		
Slideshare - UK	Sanofi	168	87		

After that, we looked for social media accounts not reported on the SanofiPasteur main website or on the national websites:

- General accounts



Social Media	Name of the account	Follower/Fan	Tweet/Post number	Views	Date of registration
Facebook	SanofiPasteur	4,789			
Linkedin	SanofiPasteur	876,992			
Linkedin	SanofiPasteur MSD	24,479			

- National accounts:

Social Media	Name of the account	Follower/Fan	Tweet/Post number	Views	Date of registration
Twitter	SanofiPasteurVE	1,147	3,320		December 2011
Facebook	Sanofi Pasteur Canada Centenary				

We analysed data on social media reach during two periods: December 2016-January 2017; October-November 2017:

- Twitter

	December 2016	January 2017	October 2017	November 2017
Tweet number	23	18	48	43
Total engagement (total number of reply, retweets and favourites)	111	156	644	356

- Facebook

	December 2016	January 2017	October 2017	November 2017
Post number	0	0	8	0



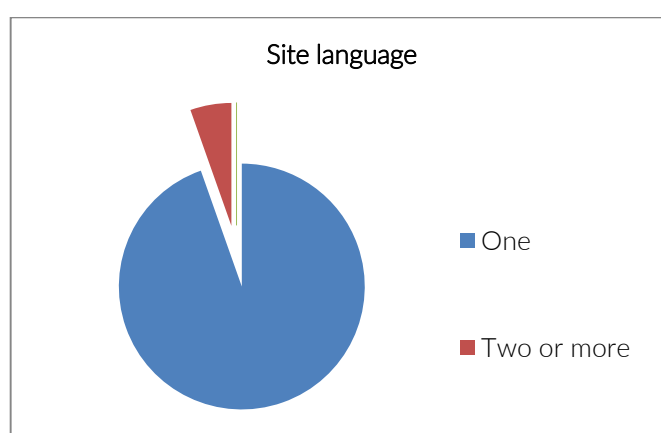


Total engagement (total monthly interactions on the single post page – likes, comments and share)	0	0	205	0
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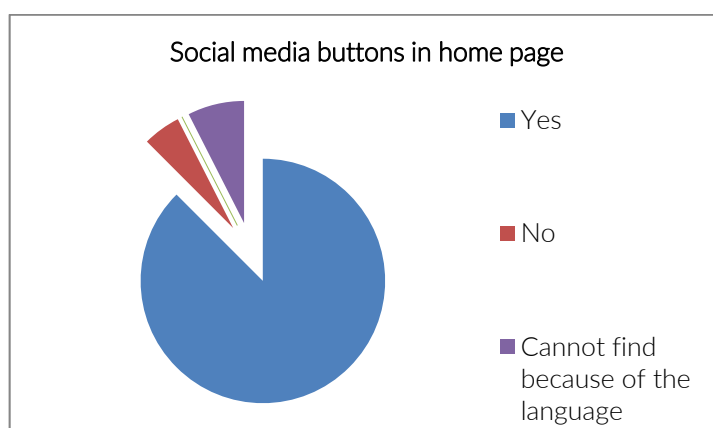
### 1.2.4 GSK

At first, we analysed their corporate identity by studying their national websites<sup>11</sup>. In the section “Global” there are 40 national websites:

- 2 out of 40 used two or more languages

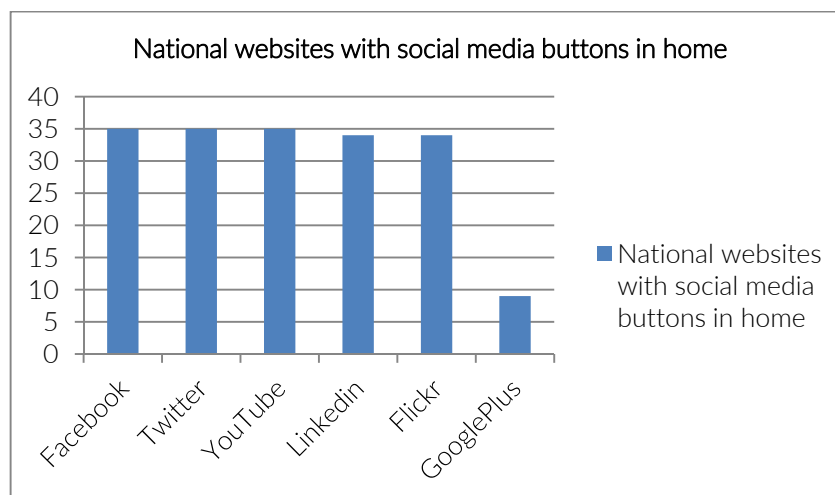


- 2 out of 40 have no social media buttons on their home page (we could not run the investigations on three other websites because of the language – Israel, Japan, Korea and Taiwan):



- Social media buttons on the home pages of national websites:

<sup>11</sup> <http://www.gsk.com/>



The second part of the investigation was focused on social media accounts.

We analysed social media accounts on the home page of gsk.com (last check: October, 16 2017):

Social Media	Name of the account	Follower/Fan	Tweet/Post number	Views	Date of registration
Facebook	GSK	255,380			
Twitter	GSK	155K	8,662		April 2007
Youtube	GSK	8,847		1,704,894	August, 11 2008
Flickr	glaxosmithkline	223	793		2011
LinkedIn	glaxosmithkline	1,023,713			
Google Plus	GSK	853			
Instagram	Gsk	3,555	55		

Then we analysed the page “Social Media”<sup>12</sup> (last check: October 16, 2017).

Social Media	Name of the account	Follower/Fan	Tweet/Post number	Views	Date of registration
Twitter	GSK	155K	8,662		April 2007

<sup>12</sup> <http://www.gsk.com/en-gb/media/social-media/>



	GSKUS	77.1K	7,048		March 2009
	GSK_AR	1,986	1,909		April 2013
	GSK_Asia	2,929	352		October 2016
	GSK_AU	2,325	1,939		April 2014
	GSK_DE	88	136		August 2016
	GSKCH_INDIA	1,055	668		September 2013
	GSK_IE	254	285		November 2016
	gsk_it	529	868		June 2016
	GSK_conferences	2,160	1,691		March 2009
	GSKScience	3,108	1,211		February 2013
	Stiefelagskco				November 2010
Facebook	GSK global	255,380			
	GSK India	174			
	Gsk Italia	963			
	GSK UK students and graduates	15,789			
	GSK futuros lideres	59,570			
	Stiefel	125,356			
YouTube	GSK global channel	8,847		1,704,894	August, 11 2008
	GSK Human Performance Lab				January, 9 2014
Linkedin	GSK global	1,023,713			



	company page				
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After that, we looked for social media accounts not reported on the GSK main website:

- General accounts

Social Media	Name of the account	Follower/Fan	Tweet/Post number	Views	Date of registration
Twitter	GSK_Oralhealth	1,381	248		July 2014
	GSKUiverston	1,034	1,200		October 2013
	GSK_ResponseCtr	377	1,626		August 2012
	SaludGSK	8,366	639		March 2015
	SaludGSK	9,211			

- National accounts:

Social Media	Name of the account	Follower/Fan	Tweet/Post number	Views	Date of registration
Facebook	GSKTurkiye	37,267			

We analysed data on social media reach during two periods: December 2016-January 2017; October-November 2017:

- Twitter

	December 2016	January 2017	October 2017	November 2017
Tweet number	-	-	72	3219
Total engagement (total number of reply, retweets and favorites)	-	-	2871	84



- Facebook

	December 2016	January 2017	October 2017	November 2017
Post number	21	8	34	36
Total engagement (total monthly interactions on the single post page – likes, comments and share)	18,620	3,515	18,585	8,816

### 1.3 Social reach of their main opposers

The alarming drop of vaccine coverage reported by several countries is due to several factors. One of them is the so called “vaccine hesitancy”, a complex and rapidly changing global problem that requires ongoing monitoring. According to WHO definition: «Vaccine hesitancy refers to delay in acceptance or refusal of vaccines despite availability of vaccination services. Vaccine hesitancy is complex and context specific varying across time, place and vaccines. It includes factors such as complacency, convenience and confidence»<sup>13</sup>.

According to ASSET experts, the quarrel about vaccines is not only a matter of information that can be solved by just providing scientific evidences against groundless claims. In such a debate, the public is already overwhelmed by information. The voices of those who defend vaccines since early age as one of the greatest progresses in the history of humankind cross with those who consider them a dangerous threat to children’s health driven by Big Pharma economic interests, without any chance to understand each other. Those on one side of the barricade provide data, graphs and evidences documented by several studies submitted to peer-review, while on the other side there are people who entrust opinions and claims by single individuals with great communicative skills, who appeal to emotions and fears.

During the project we analysed some of the main accounts against vaccines, so we provide data about two of them because of their international followers: Dr Tenpenny and Age of Autism. Both have a website, a Facebook page and a Twitter account.

*Dr. Tenpenny on Vaccines* (last check: January 10, 2018)

Website: <http://tenpennyimc.com/>

Social Media	Followers/Fan
Facebook (Dr. Tenpenny on Vaccines and	Over 200K

<sup>13</sup> [http://www.who.int/immunization/programmes\\_systems/vaccine\\_hesitancy/en/](http://www.who.int/immunization/programmes_systems/vaccine_hesitancy/en/)



Current Events)	
Twitter (@tenpennyimc)	Over 500

We analysed data on social media reach during two periods: December 2016-January 2017: October-November 2017:

- Twitter (@tenpennyimc): no longer update

	December 2016	January 2017	October 2017	November 2017
Tweet number	--	--	--	--
Total engagement (total number of reply, retweets and favorites)	--	--	--	--

- Facebook (Dr. Tenpenny on Vaccines and Current Events - @vaccineinfo)

	December 2016	January 2017	October 2017	November 2017
Post number	112	68	90	135
Total engagement (total monthly interactions on the single post page – likes, comments and share)	59,814	72,970	43,319	64,418

Age of Autism (last check: January 10, 2018)

Website: <http://www.ageofautism.com/>

Social Media	Followers/Fan
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Facebook (Age of autism)	Over 19K
Twitter (@AgeofAutism)	Over 37K

We analysed data on social media reach during two periods: December 2016-January 2017; October-November 2017:

- Twitter (@AgeofAutism)

	December 2016	January 2017	October 2017	November 2017
Tweet number	27	58	13	28
Total engagement (total number of reply, retweets and favourites)	333	1,036	133	333

- Facebook (Age of Autism - @AgeofAutism)

	December 2016	January 2017	October 2017	November 2017
Post number	38	47	51	43
Total engagement (total monthly interactions on the single post page – likes, comments and share)	1,145	4,070	4,053	3,952



## 2. MONITORING SOCIAL CONVERSATIONS

During the whole project we tried to understand in how many ways can a story be told. We thus run an analysis of the most relevant tweets and accounts using some specific key words, chosen by the editorial board. For this purpose we developed an application to identify the most influential Twitter users on specific topics, according to a list of hashtags we have provided. Being based on mentions and retweets, such an approach is also effective in discovering influential users on the short period. Every day, the app extrapolates the most popular accounts according to our key words.

A first analysis was focused on Zika virus and vaccines, and run during February 2016. A daily analysis of the firsts 20 accounts allowed us to identify some main categories of influencers:

- Institutions
- Media
- Firms
- Researchers
- University, organizations, and charities.

We analysed over 500 accounts: 13 belonged to public institutions (i.e. United Nations or House Foreign Affairs Committee), 94 to public health institutions (i.e. CDC and WHO) and 66 to employees of public institutions (i.e. Gregory Härtl – Head of Public Relations/Social Media for the World Health Organization – or Tom Frieden – CDC Director). Six accounts belonged to politicians (mostly in US). This study underlined a strong prevalence of media related accounts. We found that 16 belonged to medical or scientific journals (as The Lancet or PLoS), 80 belonged to newspapers (as Forbes) and 120 to journalists. 18 of the most popular accounts belonged to researchers; universities, charities and organizations were included in a single group of 40 accounts. #Zika and #vaccine have been the most used hashtags. In particular, #Zika has been used by 455 accounts, while #vaccine was often used in association with other terms or some related concepts, like #vaccineworks, #immunisation and #autism. Finally, we found that 63 accounts were “unknown people” that, in most cases, only produced a few tweets. Our app recognised them as influencers because of their interactions with some relevant accounts (most of the times CDC, which often replies when cited). The absence of European accounts may be due on the one hand to the strong geographical localisation of #zika (whose spread is mainly focused in South America), and on the other hand to a smaller social presence of European institutions and media.

During the second investigation, run during the period between October and December 2016, we analysed 869 accounts and categorized 373 of them:

- 85 belonged to health professionals (47 doctors, 15 paediatricians, 14 researchers, 6 epidemiologists and 3 healthcare assistants)
- 47 were media outlets
- 32 belonged to politicians
- 4 were public organizations

Public institutions (i.e. White House, WHO, CDC, Gates Foundation), politicians and media (i.e. Fox News) were the most popular accounts. Organisations and charities were highly represented too. Among personal accounts, Nancy Pelosi, Democrat spokesperson at the US Congress, has the highest number of followers (900K), followed by Jake Tapper (CNN journalist, 500K) and Jakaya Kikwete





(former Tanzania president, actually involved in the promotion of vaccination campaigns). Ten accounts declared a family history related to supposed vaccine injury.

Category	Count	Post	Follower	Post m	Follower m
(blank)	496	1,3292,332	26,896,227	26,799	54,186
Journalist	71	1,685,870	2,600,534	23,745	36,627
Organisation	57	582,960	4,056,623	10,227	71,169
Newspaper	47	1,874,249	5,773,278	39,878	122,836
Physician	47	773,348	211,327	16,454	4,496
Politician	32	313,286	15,747,741	9,790	492,117
Public health institutions	20	183,796	5,761,062	9,190	288,053
Paediatrician	15	9,0952	63,016	6,063	4,201
Employees of public institutions	14	105,235	199,250	7,517	14,232
Researcher	14	115,605	60,007	8,258	4,286
Community	12	228,874	190,905	19,073	15,909
Family history vax injury	10	379,970	30,501	37,997	3,050
Company	7	92,288	244,166	13,184	34,881
Epidemiologist	6	66,284	7,039	11,047	1,173
University	6	9,7328	22,400	16,221	3,733
Public institutions	4	5,0505	2,471,558	12,626	617,890
Activist	2	1,072,190	25,798	53,610	12,899
Entomologist	2	47,788	6,610	23,894	3,305
Nurse	2	39,076	3,776	19,538	1,888
Teacher	2	104,103	9,589	52,052	4,795



Associations	1	682	274	682	274
Paramedic	1	57	47	57	47
Pharmacist	1	19,893	3,314	19,893	3,314
TOT	869	2,0251,700	6,4365,042	23,305	74,068

Most of the users used hashtags to describe their activity on Twitter, the most relevant being #CDCwhistleblower. This hashtag is strongly connected with the movie VAXXED released on 2016 and directed by Andrew Wakefield. This is a well-known name: in 1998, Wakefield published a study in *The Lancet* suggesting that vaccines caused autism. In 2010, the study was retracted following the report of serious ethical violations by Wakefield himself, whose UK medical license was then revoked. The movie is based on a conspiracy theory according to which there is a CDC whistleblower who revealed that the CDC manipulated the results of a study showing a link between vaccines and autism. The study – performed by two CDC employees, Frank De Stefano and William Thompson – confirmed that there is no evidence that children with autism were more likely to have received their first MMR vaccine earlier than neurotypical controls. However, a review of the same data led to a different conclusion, according to its author Brian Hooker: there is a strong correlation between MMR vaccine and autism in black male children who received the shot within their first 36 months of life. The Hooker’s paper was retracted too, due to “undeclared competing interests on the part of the author” and post-publication “concerns about the validity of the methods and statistical analysis”. Moreover, Thompson – the whistleblower – was not aware of being recorded over the phone and never watched the movie before its release. Nevertheless, the anti-vaccine movement continues to consider this story as a clear proof of public health institutions attempts to hide the truth about vaccines.

Following #CDCwhistleblower, our analysis found other relevant hashtags, as shown in the following table:

#	Count
CDCwhistleblower	5
Innovation	4
Globalhealth	3
Medicine	3
Repealthe8th	3
Science	3
Truth	3
Autism	2
CCOT	2



GIS	2
Health	2
Healthcare	2
Homeopathy	2
Politics	2
Publichealth	2
Research	2
Skeptic	2
Tweetiatrician	2
Vaccines	2

It is interesting to note that 52 users described themselves as a mom, while 28 as a dad. Among medical conditions explicitly cited in the accounts, we found 6 references to cancer and autism.





### 3. MANAGE SOCIAL CONVERSATION

#### 3.1 What we did to increase mutual trust among actors and mobilize stakeholders, and to promote: democratic participation and engagement among the public; credible, transparent and two ways communication by institutions and health authorities; verifiable and understandable information by researchers and industries

During the last four years, we have performed deep analysis on social media strategies and accounts. A lot of work useful to realize that they are a virtual medium that reward human touch: for this reason, it is hard for a temporary account as ASSET to build a network and become an influencer about specific topics. However, we tried to be part of the conversation and to publish and retweet only verifiable and understandable information, and to spread our articles and video-interviewes through our partner's account.

#### 3.2 Data on social media content

As part of our work, we published contents on Twitter, Facebook and LinkedIn.

##### Twitter

Twitter has been the "easiest" social media to spread our voice. Infact, thanks to a proper use of specific hashtags we were able to reach a large number of accounts: during months of intense activity we collected over 15K impressions (which is the number of people reached by a tweed). During the years we have found two main topics: Zika and vaccination. Moreover, every year we focused our discussion on vaccines and flu during fall.

	Number of tweets*	Total engagement *
Zika	217	200
Vaccination/vaccinations/vaccines	307	600
Flu/influenza	124	132

\*Data were not available for March and June 2015

When we tweeted about our original work, for example during the final conference (October 2017), we reached good results:

Period - Event	Tweets	Tweet impressions	Profile visits	Mentions	New followers
October 2017 - ASSET final conference	66	16.8K	297	43	7

October 2017:

- 39 tweets were published in the weeks before the event
- 18 were published during the conference



- the total engagement (“Total number of times a user interacted with a Tweet. Clicks anywhere on the Tweet, including Retweets, replies, follows, likes, links, cards, hashtags, embedded media, username, profile photo, or Tweet expansion”<sup>14</sup>) of October has been 332

### Facebook

During the project, we noticed that on Facebook we were rewarded publishing news from our website and by day-by-day activity. Hashtags on Facebook are less common than on Twitter and the website rules are based on interactions.

Using this social media, we have learned that, unlike Twitter, hashtags are to be avoided because the post reach (“the number of people who saw any of your Page posts”<sup>15</sup>) is better if none is used.

Moreover, Facebook’s algorithm has changed many times during these years. The last update, during 2017, changed this social media in a very deeply way. We can notice the difference between this year and the last thanks to two case studies: citizen consultation and final conference:

- ASSET citizen consultations: 8 post in three months gain 3,373 post views.

Period - Event	Number of posts	Reach
August 2016 - Citizen consultation (promotional post about the event)	3	1,584
September 2016 - Citizen consultation (post about the event)	2	303
November 2016 - Citizen consultation (post on the preliminary results)	3	1486

- ASSET final conference: 16 post in two months gains 2,517 post views.

Period - Event	Number of posts	Reach
September 2017- Final conference	2	94
October 2017- Final conference	14	2,423

<sup>14</sup> <https://support.twitter.com/articles/20171990>

<sup>15</sup> [https://www.facebook.com/help/274400362581037?helpref=uf\\_permalink](https://www.facebook.com/help/274400362581037?helpref=uf_permalink)



## 4. FINAL CONSIDERATIONS

We run this analysis in order to obtain a better understanding of the social media activities about some issues related to influenza, vaccines and pandemic issues. For this reason, we analysed social accounts of international agencies, pharmaceutical industries and some of their major opposers.

Our analysis shows that the WHO is the international health agency with more engagement on social media. Infact they have over 4.1M followers on Twitter and over 3.4M fans on Facebook (they are the only one to have more than a million fans) and their total engagment reached over 200,000 during November 2017 (222,866 on Twitter and 294,882 on Facebook).

It is also interesting to note that every international health agency has accounts on different social networks (WHO and EURO WHO use YouTube, Twitter, Facebook, GooglePlus and Instagram; ECDC uses Facebook, Twitter, YouTube and LinkedIn; CDC uses Facebook, Twitter, YouTube and Instagram) but they all use mostly Twitter and Facebook. At the opposite, the less used social media are YouTube for WHO and ECDC (56,224 and 375 followers), and Instagram for EURO WHO and CDC (2,500 and 56K followers).

Regarding vaccines industries, our analysis shows that Pfizer, Merck and Sanofi are more involved in social media activities than in website maintenance and this confirms the fact that social media are a medium between public and the industry in the field of Research and Innovation on vaccines and antiviral drugs. Moreover, it is interesting to note that on Pfizer and Merck websites, the social media page is not updated: some links were unavailable and we found more accounts than the ones reported. This would suggest that there is a lack of communication between different webmasters and social media managers, and that social media activities are more important than website maintenance. Sanofi does not have a social media page. At the opposite, all GSK's national websitse work very well and we found few social media accounts that were not reported on the main website.

Each country has a different number of social media accounts, with different strategies and different number of posts/tweets. For example:

- Pfizer.com reported only five Facebook national accounts (three of which – Finland, Russia and Sweden – are unavailable), but we found 17 more national accounts (among which Facebook pages of PfizerRussia and PfizerFinland). Among the different social media, LinkedIn is the one with more fans (1,517,949), followed by Facebook (269,852) and Twitter (205,000)
- Msd.com, merck.com and Merckgroup.com reported different social media accounts, but we found some other accounts not reported on those websites

Some considerations on Twitter accounts:

- Pfizer: @Pfizer is the oldest and the most followed account (205K since July 2009); @PfizerEspana is the second account in terms of followers and data, but the most active in terms of tweet activity (6,430 tweets published since March 2010); @PfizerTurkey is the third in terms of followers and data (12K since March 2010) and it is also interesting to note that Turkey is the 8<sup>th</sup> in terms of tweet activity
- Merck: @MerckManualPro is the most followed account (25.5K followers) and the second in terms of tweet activity (6,159 tweet); it is interesting to note that 4 accounts located in the first 8 positions are related to the Merck manuals (MerckManualPro, MerckManualHome, MerckVetManual and MerckManualPet)



- Sanofi: Sanofi has very few accounts (they use mostly @Sanofi and @SanofiPasteur); @Sanofi is the most followed and the oldest account (96.3K followers since April 2009) but @SanofiCanada is the most active account
- GSK: @GSK is the account with most followers (155K), the biggest tweet activity (8,662) and the oldest one (April 2007), followed by @GSKUS (77.1K followers and 7,048 tweets since March 2009)

Some considerations on Youtube accounts:

- Pfizer: despite PfizerUK is the oldest account (December 2008), PfizerColombia is the one with most followers and the highest numbers of views (19K and 11M); with 10K followers, PfizerNews is the second account in terms of followers and date of registration (10K since July 2009)
- Merck: MerckManuals is the most followed account (2,247), MerckTaiwan is the one with the highest number of views (534,335) and M - Das Entdeckermagazin is the oldest one (June 2010)
- Sanofi: Sanofi has very few accounts (they use SanofiTVen, SanofiPasteurTV and SanofiPasteurCanada); SanofiTVen is the most followed and the channel with more views (8,397 followers and 2,196,772 views) and SanofiPasteurTV is the oldest one (online since August 2008)
- GSK: GSK global channel is the account with most followers (8,847 followers), the one with most views (1,704,894) and the oldest (online since August 11, 2008)

Facebook accounts:

- Pfizer is the page with most fans (269K)
- Merck: The Merck Veterinary Manual is the page with most fans (359K)
- Sanofi: SanofiPasteur is the page with most fans (4,789) but it is no longer update
- GSK: GSK global is the page with most fans (255K)

As a last part of our analytics work, we studied some accounts against vaccines and vaccintions. We found that they all reached the highest level of engagment on Facebook and we think that this is related with the different length of texts between Facebook and Twitter. Infact, they are more likely to write long texts to argue about the damage of the vaccines and to display touching stories about alleged damage caused by vaccines in babies..

In general, using this social media we have learned some useful tips:

#### Twitter

- hashtags: on one hand, they are very useful to reach all the accounts that are interested in a topic but, on the other hand, the interaction rate increases with 1-2 hashtags, and decreases from the third one.
- replies: Twitter allows to send a reply or mention to every tweet but most of the time no one cares (unless you are an influencer or somebody famous) because people prefer to talk with other people (and not with the account of a project) or with friends.

#### Facebook

Facebook's algorithm has changed many times during these years. The last, during 2017, changed this social media in a very deeply way. Infact, during the last month everyone who used Facebook to



promote his work, activities, ideas, and so on, saw the reach of his posts decrease. This fact happened in the same period in which Facebook announced the launch of “Explore Feed”, a new tool that brings together all the post published by the pages in a different home (unless a post is sponsored). This year, Facebook published the “News Feed Publisher Guidelines”<sup>16</sup>, which explain that: «when ranking News Feed based on how meaningful each story might be to each person, we look at many personal signals, such as how close someone is to the person or Page posting, stories they’d want to talk about and share among friends and family and videos they’d spend time watching. We also look at more universal signals like the overall engagement (likes, comments, shares) of the post».

Shortly, everytime a user opens Facebook, the algorithm tries to answer to some questions:

- what stories have been posted by friends and publishers?
- who posted this story?
- how likely are you to comment on this story?
- What is the relevancy Score?

These changes are important because they will lead the communication in the future. If an institutions or a project wants to share their work on Facebook, they must consider a budget for advertising and, most of all, they cannot use only Facebook: they also need to implement other online tools, like a good website and a good newsletter.

<sup>16</sup> <https://www.facebook.com/help/publisher/newsfeedguidelines>