

1 **Title Page**

2 Challenges in communication during Emerging Infectious Diseases (EID) management. Eight  
3 edition of the Val-de-Grâce School's Seminar on EID, Paris, France, 29<sup>th</sup> March 2019

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5 **CONFERENCE SUMMARY**

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30 have abstracts.

31 **Manuscript:**

32 The 8<sup>th</sup> Val-de-Grâce School's Seminar on Emerging Infectious Diseases (EID) was held in  
33 Paris, France, on March 29<sup>th</sup>, 2019. The goal of this seminar was to bring together, in a "One-  
34 health" perspective, scientists, experts and decision-makers interested in human, animal and  
35 plant health, social sciences, environmental sciences, prospective analysis, biosafety and de-  
36 fense. In the era of social networks and fake news, communication appears to be a challenging  
37 and key issue to address in the management of EID. Indeed, communicating during EID events  
38 and crises should make it possible to maintain control over the (mis)information circulating  
39 among the public and the health professionals involved, but also to promote behavioral changes  
40 in order to reduce individual and collective consequences of an EID, including dissemination.  
41 Therefore, the 2019 seminar focused on communicating during an EID crisis.

42 The seminar opened with a plenary conference given by Dr. Pierre Le Coz entitled "Communi-  
43 cating under uncertainty".

44 Using examples dating back to ancient times, he reminded the audience how difficult sending  
45 rational messages may be, when it comes to human being endowed with imagination and having  
46 concern and feeling. A few clues can help in transmitting rational messages, including a cau-  
47 tious approach, appropriate timing, trustworthiness and realism.

48 The first panel was entitled "Communication from field actors to decision makers". The first  
49 speakers were Pr. Bruno Hoen and Dr. Patrick Saint-Martin for "Feedbacks on the Zika expe-  
50 rience in the West Indies in 2016".

51 They started with a brief summary of the Zika outbreak in French West Indies and how com-  
52 munication was prepared even before the first cases were identified. A community-based strat-

53   egy was set up at several levels to increase the chances of reaching the most vulnerable indi-  
54   viduals, such as pregnant women. Despite this anticipation, the communication strategy had to  
55   be modulated according to the data available at the time of the outbreak, the evolution of  
56   knowledge, and the perception of prevention messages. Moreover, the speakers pointed out that  
57   as the incidence of the disease decreased, the French West Indies population felt less involved  
58   and receptivity to health messages waned. This needed real-time tuning of the communication  
59   strategy by regional and national health authorities.

60   Dr. Simon Cauchemez then gave the following talk, on " Mathematical models: making the  
61   results understandable". He discussed the objectives of those mathematical models, namely,  
62   contextualizing an epidemic phenomenon, and explaining the determinants of an existing situ-  
63   ation at any given time. In doing so, this approach can help to predict the evolution of an epi-  
64   demic and in fact to adjust the control and prevention strategies to an anticipatory approach. He  
65   highlighted the fact that these real-time models are limited by the availability of field data dur-  
66   ing the epidemic. Therefore, uncertainty of these results should be kept in mind throughout the  
67   data analysis, especially by decision-makers, and reinforcement of the links between surveil-  
68   lance, care and research should be anticipated.

69   Dr. Patrick Brasseur then delivered a presentation entitled " Crisis communication: principles,  
70   imperatives and needs of decision-makers." He explained the role of a communication coordi-  
71   nator in dealing with a decision-maker, and listed what a decision-maker needs to communicate,  
72   or not. He emphasized the principles established by WHO in the updated International Health  
73   Regulations to optimize communication by national authorities during crisis: 1) trust, 2) trans-  
74   parency, 3) consistency, and 4) acceptance of uncertainty. He pointed out the limits of those  
75   measures the sole objective of which is reassurance, and the risk of a "backfire" effect. Finally,

76 he highlighted that certain elements of communication are tailored to a given geographical con-  
77 text, and that they cannot be translocated to another different setting without adjustment.

78 The second panel addressed the following questions "What to say? To whom? When and  
79 How?". The first speaker was David Heard, on "Institutional communication". He stated that  
80 the sole providing of information is generally ineffective and even counter-productive when  
81 given without appropriate communication (e.g., vaccine defiance). The issue of the communi-  
82 cation was addressed as well as that of the necessary preparation in advance of the epidemic  
83 crisis. The choice of the channels best adapted for communicating with the public, and the  
84 notion of hearing the response from the targeted audience, were also addressed during the  
85 presentation. The relevance and modalities of evaluating the communication after the crisis  
86 were also thoroughly discussed with participants.

87 The second speaker, Bernard Seytre, presented a session on the subject "What is health liter-  
88 acy? Building on the knowledge of the individuals to change behavior". The objectives of the  
89 communication are to achieve a change in social behavior towards greater autonomy and better  
90 health. To do this, communication must be based on an assessment of who are the "receivers".  
91 An accurate assessment of the current situation and previously failed communication strategies  
92 is necessary in order to develop better-adapted methods of communication. He took as an ex-  
93 ample the instructions to reduce wildlife hunting to combat the spread of the Ebola virus, which  
94 he considered irrelevant in view of the modes of transmission during epidemic periods, and  
95 impracticable given the predominant role of bush meat in certain regions. Repressing bush  
96 hunting is therefore potentially counter-productive for education and communication towards  
97 human communities at risk.

98 Finally, Dr. Arnaud Veïsse and Joseph Rustico presented "Information for target populations  
99 (example of exiles)". These speakers raised the issue of difficulties in targeting particularly

100 hard-to-reach people such as exiled persons. To set relevant and efficient communication strat-  
101 egies targeting these vulnerable groups, in particular in complex environments marked by lan-  
102 guage difficulties or traumatic experiences, the incorporation of social determinants seems nec-  
103 essary. The role of the "health mediator" was discussed as a potentially effective solution to foster  
104 reciprocal understanding between the vulnerable persons and the institutions (e.g. health sys-  
105 tem).

106 As a final message, communication in crisis situations appears essential and should be adapted  
107 over time to the evolving epidemiological situation and to the profile of targeted populations.  
108 Its many limitations must be known and anticipated by decision-makers. The use of new digit-  
109 ized tools such as social networks should be considered as powerful channels and used properly  
110 to guard against misinformation.

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