

4. Israel

4.1 General dialogue details Israel

Dialogue data

Location of the dialogue	Bloomfield Science Museum, Jerusalem
Topic	Nanomedicine
Date of the dialogue	19 October, 2017
Participants	<p>13 participants (8 men, 5 women):</p> <ul style="list-style-type: none"> • Representative of advisory company for corporate responsibility • Post-doctoral researcher in the field of nanomedicine • Representative of popular science internet news paper • Representative of the ministry of health – working in the field of social inequality • Representative of the ministry of justice – working at the authority for privacy protection • Citizen dialogue representative (biology PhD. Student) • Citizen dialogue representative (retired electrician) • PhD student in Science and Technology Studies • Science educator with microbiology background • Representative of a health maintenance organization • Retired professor and developer of pharmaceutical products • Retired professor and developer of cancer nanomedication • Retired director of an optical biomedical company

Notes from the organizer

The dialogue session in Israel hosted a group of participants that were eager to share their opinion and really interested in exchanging views. Due to this session being one of the first that was organized, some hurdles with the dialogue format were experienced, which prevented the discussions from reaching the desired level of depth⁶. The final exercise, in which participants had to identify actions and interactions to enhance the integration of societal perspectives in nanotechnology research and innovation, focused mainly on how the system is currently organized and left little room for discussion on how to better identify and integrate societal perspectives.

⁶ See chapter 9 for a reflection on how and why the block 3 exercise was adapted.

4.2 Recommended directions for change

The participants of the Israeli multi-stakeholder dialogue discussed quite extensively the structure of the current system. Several themes came up on how the system could be improved, although it was not always clear how these themes specifically related to improving the integration of societal perspectives in nanotechnology research and innovation processes. Not all of the suggestions were fully developed in the discussions, but the themes do provide an idea of the “directions for change” that were considered important in this particular dialogue session. The original responsible innovation table that was created by participants can be found in Appendix 8.

Fostering transparency in the system

Transparency was a prominent theme in the discussions that took place. Participants were particularly concerned about the general lack of awareness about the research that is being performed and the medical (nano)products that are currently on the market. Participants suggested the establishment of an organized and accessible databank in which new research and products under development are described. Patients could then explore for themselves what is currently on the market and what is not, or they could check the current stage of development of certain drugs. This would allow them to find out for themselves which drugs might be relevant to try. One of the participants did mention that it might be difficult to publish information on products that are still under development, due to market competition. Another aspect of transparency that participants spoke of was the transparent supervision over pricing of medical products, particularly if the development of these products was publicly funded. Lastly, it was mentioned that policies and guidelines to supervise research and innovation processes should be openly accessible to both researchers and others in society who would like to check whether researchers that received public money are using the money in an appropriate way.

Improving science communication and stakeholder discussions

Communication with citizens was a topic that came to table several times. Yet, the suggestions of the participants seemed to focus more on informing and educating citizens than on taking citizen perspectives into account in research and innovation processes. Many participants agreed with one another that improved science communication is needed, and that policy-makers should do something about this. Some proposed more communication on basic research through cooperation between the education system and academia. Others mentioned that media should cover more on science and technology developments to dispel public concerns. One of the participants nuanced that dispelling concerns is not the role of the media, and emphasized that media should also be critical of what is happening in science and technology. Many participants wanted to see more communication and reporting to the general public about what research is currently performed. They wanted this information to be disseminated via non-commercial media channels, and the content should be accessible and comprehensible to everyone (e.g. written in clear language).

The moderator of the session tried several times to encourage the participants to also consider in what way citizens and societal actors could or *should* influence the nanotechnology research and innovation system. However, the participants seemed quite reluctant in working with this idea. Some participants expressed their concern that citizens might not be able to help in setting research priorities, since they can be influenced easily by (false) stories that are told to them. Others explained that they do think it would be legitimate to involve citizens in priority setting for publicly funded research, since it relates to how their tax money is spent, but stressed that much of the research

in the field of medicine is actually performed by private companies. Participants did feel that platforms for continuous dissemination and discussion between interested parties (including patients and citizens) should be developed, although it did not become entirely clear what should be discussed within these platforms. Participants spoke more concretely about the need for feedback on how patients value the drugs and medical products that are being developed, and suggested some form of “satisfaction research”. Such feedback would be important for both the public and private sector in the nanomedicine field.

Fostering ethical behavior and attention for safety

The participants made several comments on ethical behaviour and safety in nanotechnology research and innovation processes. Participants agreed that quality control and ethics are important in research and innovation, but did not immediately specify what kind of quality control should take place (or by whom) and what ethical principles should be adhered to. Some aspects that came up throughout the dialogue include: 1) clear criteria for professional quality and avoiding harm to basic principles, particularly if researchers receive public funding, 2) weakening the relations between industry and healthcare organizations/doctors, 3) attention for safety of people working with nanoparticles that could penetrate the body/environment and result in toxic effects, and 4) assuring patient confidentiality and privacy in times of big data, specifically if sensitive data can be collected via nanomedicines/nano-medical devices. One of the participants mentioned that in each of the research and innovation phases (from basic research to selling products on the market), we should anticipate potential problematic situations that might arise. It was not specified who should be responsible for this.