Editorial

Visual Vaccinology – The Importance of Visual Communication

Science depends upon visual communication. This typically includes graphs, charts, slides, and other visual depictions of data and scientific concepts. More recently, and especially in other areas of science and medicine, communication by the use of images has become both necessary and appropriate. It is with the visual image, as opposed to the purely textual or numerical, that trends, patterns, and variations are often spotted and appreciated – leading to new insights or at least different interpretations of the data. Too, a visual image can, and often does, leave a lasting memory and may lead to stronger memory associations than text or numbers do (at least for some people). Lending credence to the increasingly important impact of visual images in contemporary society, the Association of College and Research Libraries recently published a set of visual literacy competency standards for higher education. Their reasoning is impressive, and I quote extensively from their work:

“The importance of images and visual media in contemporary culture is changing what it means to be literate in the 21st century. Today’s society is highly visual, and visual imagery is no longer supplemental to other forms of information. New digital technologies have made it possible for almost anyone to create and share visual media. Yet the pervasiveness of images and visual media does not necessarily mean that individuals are able to critically view, use, and produce visual content. Individuals must develop these essential skills in order to engage capably in a visually orientated society. Visual literacy is a set of abilities that enables an individual to effectively find, interpret, evaluate, use, and create images and visual media. Images and visual media may include photographs, illustrations, drawings, maps, diagrams, advertisements, and other visual messages and representations, both still and moving” [1].

Another author stated the impact of visual literacy this way: “Visual literacy stems from the notion of images and symbols that can be read. Meaning is communicated through image more readily than print, which makes visual literacy a powerful teaching tool” [2].

In addition, pattern recognition is what highly effective physicians and scientists do – recognizing patterns, including visual patterns – and associate them with the data on hand. Thus, one can imagine the ease with which a new physician might later diagnose a case of measles, if exposed early in his or her education to a picture of the measles rash and associated Koplick’s spots in the mouth. How much harder might it be to recall a distant textual description of that same rash. Generally speaking, our minds are wired to remember and recall the pictorial, the visual, and the impactful.

For this reason, we at VACCINE are formally introducing a new section in our journal – entitled “VISUAL VACCINOLOGY”. The idea behind this new section is to provide a forum where visual information that will benefit our readers can be published. We believe, for example, that our readers would benefit, based on different levels of education, experience, and time in the field of vaccinology, from visual images that might educate in a manner otherwise hard to duplicate. Using the previous example of measles, one older in the art (such as myself), would be unlikely to miss a classic case of measles having seen many such cases. On the other hand, recent cases of measles presenting to emergency rooms and to young infectious disease physicians have been missed due to their unfamiliarity with what the “picture” of measles looks like. The result has been a delay in diagnosis, further exposure of susceptibles, and larger outbreaks. Similarly, many of our readers may be unfamiliar with what tetanus “looks” like, or rabies, or what an intradermal needle looks like. These are but some examples of what we would like to include. Last March, the journal published a Visual Vaccinology article about Nicolau syndrome [3]; that article is a great example of what the journal is hoping to publish in this section. Pictures, graphs, charts, illustrations – in short anything of a visual nature – are appropriate for this section, with an accompanying 200-word textual description. The Associate Editor who will be stewarding the launch of this new section is Dr. Andrew Artenstein. If you have images you believe would be of interest to VACCINE’s diverse readership, please consider submitting them to the Visual Vaccinology section. We look forward to your thoughts and comments on this newest enhancement to our journal and your learning experience!

References


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