The use of photo-essay to report advances in applied science and health

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ABSTRACT

Background: In the applied health and science disciplines there is an expectation that project work is reported through a publication. The conventional papers written to do this follow a structure that includes sections providing background, methods, results and a discussion or conclusion, supported by figures and tables. Sometimes photographs are included, and with more on-line publications the opportunities have increased for these to be available in full color. Borrowing from the field of photojournalism photo-essays are now a publication option where a series of images are used to tell the story; these are often related to health and well-being.

Aims: To summarize the methodology used to effectively combine a series of images with a brief text, and short reference list to create a visually engaging and informative short report.

Guidelines: Images are taken throughout the project with consent obtained from those whose images will be recognisable. Creative licence is used to compile representative images into a sequence that conveys the background, method, results and outcome(s) of the project. Images need to be of high resolution; editing for light, colour and contrast, and cropping is allowed to increase their clarity and relevance. The ethics of photojournalism apply making inappropriate manipulation of images or erroneous captions unacceptable.

Conclusion: Photo-essays are a novel and informative way to report on an applied health, social or scientific topic. The format is an excellent one to use for a brief report, or to prepare a research presentation for a scientific meeting.

INTRODUCTION

Photo-essay is a novel and informative way to report on an applied health, social or scientific topic. The concept of a photo-essay comes from the discipline of photojournalism, a particular form of journalism that uses images in order to tell a news story [1-3] The central premise is that a picture is “worth a thousand words,” hence by combining an effective photo or a series of photos a story can be told with the minimum of written text as the scene is set by the images, and often the immediate and key message of the story is actually presented through the image [4]. While the term photo-essay is usually understood to refer only to a series of still images and accompanying text, there are various adaptations on this theme, for instance the news stories used in broadcast journalism where video footage is accompanied by a reporter speaking on or off camera [5, 6].
For applied science and health reports to use the medium of photo-essay, a creative format is necessary that is not only informative but is also interesting to follow and which conveys the key elements of the story to the reader. A good model is the one used in journals like the International Journal of Epidemiology (https://academic.oup.com/ije/pages/Instructions_T o_Authors), which calls for photo-essays to 10 to 15 images with 200-500 words of accompanying text that relates to health and wellbeing. Areas covered by published examples include: global health care delivery concepts [7]; roles of health care providers [8]; epidemiology of illness or injury [9, 10]; intervention to address a specific infectious disease [11], and how WHO ‘Health Promoting Schools’ provide an environment that can help advance the UN Sustainable Development Goals (SDGs) [12].

Another style just relies on the graphic content of the images chosen; here a larger number of photos are included, there is no accompanying text or reference list, but again short captions are used to explain each image. An example of this style depicts the care provided for the wounded during the Iraq war [13]. The stark reality of this style of essay is at one end of the spectrum while at the other a more artistic style can be used where the photos are accompanied by artistically rendered text captions, along the lines of those in photobooks made using Apple software, or on scenic postcards. An example is the report of a digital photographic experiment prepared by archeologists to that combines elements of archaeological ethnography with photography [14].

The purpose of this paper is to outline how an author unfamiliar with this form of publication can construct an effective photo-essay.

GUIDELINES

During the conduct or evaluation of a project include the taking of digital images as a defined role of one of the team, and have the necessary consent forms prepared in order for those whose images will be recognizable in print to give their informed written consent for the to be used.

Plan to take images that will be:

- Complementary to each other and to the written elements of the essay
- Informative so that they make the facts and message of the essay more accessible and easily understood by the reader

Beyond this, the creator of a photo-essay has considerable scope to add artistic touches to his or her essay. The rules are few and the canvas broad.

In putting the photo-essay together:

- Write the overview wording that describes the purpose of the essay
- Select from the pool of images ones that illustrate the narrative
- Write a caption for each selected image which clearly describes the elements that the image shows which are relevant to the essay topic.

When choosing images:

- Select high resolution images for clarity in print versions of the essay, or when viewed as an on-line publication.
- Use a photo editing program to optimize contrast and lightness/darkness and crop extraneous detail.
- Avoid using images that are of poor quality in terms of exposure, focus, white balance or because of distracting content
- Begin the essay with an image or two that are general in nature to set the scene; these represent the issue the essay intends to portray, much the way the introduction does in a conventional paper.
- Next add images that relate to specific elements of the purpose of the essay topic; in the way the methods section of a paper does.
- Follow with close up images of people, devices or situations that show the key elements or effect(s) of the topic or intervention; these are like items presented in the results section of a scientific report.
- End with general, outcome or closure images that indicate the end point(s) and relevance of the message of the essay.

Add appropriate reference to the text and in a conventional reference list: references:

- Include 10 and 15 to provide a source of background material which expands on the points covered in the essay or to corroborate specific facts, methods or data mentioned in the text.
• Format the references and include them in the text as required by the journal chosen for your report – look at the instructions for authors.
• Number them in sequence in the text using superscript or inclusion in brackets if the Vancouver style is required; this makes the text easier to read than Harvard style which requires author names and year of publication in brackets.
• Do not include references in the image captions as a general rule. However in certain circumstances where a particular fact or element of the essay is evident in the image, or include in the caption, that is not included in the accompanying text there is the option to add a reference.

Consider the ethics of your essay:
• A major question for authors and editors relates to photo-manipulation. Nowadays, digital images can be edited and even “photo-shopped” to such an extent that elements or individuals can be freely altered, or even deleted or added. Ethically, there is no place for this in a conventional photo-essay, where such images are unacceptable.
• Most pictures are simply manipulated for contrast, color enhancement or to make them lighter or darker, and cropped to make them illustrate clearly the parts of the image relevant to the photo-essay. This form of editing (photo-manipulation) is acceptable.
• Another ethical issue relates to false or misleading captioning; captions must be accurate and informative and ideally they add wording that compliments and expands on the information provided in the written text.

DISCUSSION
This paper describes guidelines for preparing a photo-essay to report on an applied health program or the conduct of a scientific project. Only a small number of journals accept submissions of photo-essays, but this format is an excellent one to use for a brief report, or to prepare a research presentation for a scientific meeting. Photo-essays can also be used as the basis for progress reports to project supervisors or funding agencies, and are a good format for young investigators to consider.

It is important to remember that the images chosen are intended to tell the story, with the accompanying text providing background, methods and selected data that compliments the photographs. A good essay should engage the interest of the reader visually, and allow a rapid grasp of the topic, issue or approach presented. The ability for subject matter to be taken in quickly is important in a world where we have less and less time to read through complete articles and formal reports. Also, photo-essays appeal to an audience that is broader than fellow scientists or educators; the lay public can also often learn a lot from a well-constructed photo-essay.

While considerable creative leeway exists in the construct of a photo-essay, as in photojournalism and broadcast journalism it is expected that a code of ethics is followed. This requires that work based on photographic images or video footage must tell the story with pictures that are honest and not inappropriately manipulated.

Simple photo-essays are readily assembled if a photographic record of sufficient depth and quality has been compiled during the planning, conduct and evaluation phases of a project. But, for those who wish, considerable opportunities exist to be creative in the design and execution of photo-essays. On-line publication in particular lends itself to faithful reproduction of full colour images and video montage in large formats. However, this option for creativity is counterbalanced by the subjective nature of the review process involved in assessing the merit of an image based submission, and its suitability for publication.

CONCLUSION
The photo-essay format has its origins in photojournalism. Applied to report advances in health and science, a series of photographs are used to tell a story or frame a report. The images should be of high quality both in terms of resolution and the impact of the subject matters they depict. To plan and create a photo-essay requires having digital cameras readily available and taking photos throughout the project to assemble the number and variety of photos in the portfolio from which the essay images will be selected. Also, consent must be obtained as the images are acquired from those who will be able to be recognized in the published photos.

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CONFLICT OF INTERESTS

None.

REFERENCES