HEALTH IN TRANSITION

Translating developmental origins of health and disease science to improve future health in Africa

ANDREW J MACNAB,
ABDALLAH DAAR & CHRISTOFF PAUW
EDITORS

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PHOTO-ESSAYS: A CREATIVE FORMAT FOR EFFECTIVE COMMUNICATION

Lynn Stothers,¹ Ronald Mukisa²
and Andrew J Macnab³

Scientists and educators regularly face the challenge of effectively, concisely and interestingly communicating their ideas and findings, and the need to engage readers unfamiliar with the concepts or issues they want to describe.

In the context of advancing the developmental origins of health and disease (DOHaD) agenda, effective communication is essential, particularly when aiming to engage government agencies, inform leaders in the health care professions, and motivate organisations able to drive change in the community. Hence, it is

-
- 1 Peter Wall Institute for Advanced Studies, University of British Columbia, Vancouver; Faculty of Medicine and Principal Investigator, International Collaboration for Repair Discoveries, University of British Columbia, Vancouver, Canada.
  - 2 Stellenbosch Institute for Advanced Study (STIAS), Wallenberg Research Centre at Stellenbosch University, Stellenbosch, South Africa.
  - 3 STIAS; Faculty of Medicine, Department of Paediatrics, University of British Columbia, Vancouver, Canada.

important to consider approaches that might make key DOHaD concepts and health promotion strategies more readily accessible to any target population.

In this chapter, we share our experience from a collaboration between the Peter Wall Institute for Advanced Studies (PWIAS) at the University of British Columbia, and STIAS at Stellenbosch University to explore ways to make research and global public health issues accessible and meaningful to a broad readership; we identified the genre of photo-essay as an established and valid format, and describe its origins and principles.

A photo-essay effectively presents a broad range of facts and data to varied audiences because the format principally relies on the impact visual images have. When well-chosen images are combined with appropriate captions and a concise explanatory text, the resulting composition can engage and inform a wide range of readers, and in a way likely to allow even those unfamiliar with the topic to rapidly gain an overall understanding of the information and recommendations presented.

Photographs are a powerful way to furnish evidence because they expand the scope of the information provided and uniquely engage individual readers. The reader cannot be made to look at the images in the presented order, nor can the time spent on each image be indicated. So, we suggest that a photo-essay offers a very individual, informative yet flexible format for sharing ‘what works and why’, and how, and under what circumstances it works in the context of DOHaD.

Introduction

Photo-essays borrow from the field of photojournalism and are now a publication option where a series of images is the principal means of telling the story – many such stories relating to health and wellbeing.

Creative licence is used to compile representative images into a sequence that conveys the background, method, results and outcome(s) of the project to be described. The images must be good photographs, selected on individual photographic merit, as well as for the specifics and relevance of what they contain. Selected images need to be of high resolution; edited optimally for light, colour and contrast; and cropped to increase their clarity and relevance. The ethics of photojournalism apply, hence inappropriate manipulation of images or including erroneous captions are unacceptable.

Photo-essays are a novel and informative way to report on applied health, social or scientific topics. The format is an excellent one to use for a research presentation for scientific meetings but is also well suited to prepare informative brief reports or executive summaries aimed at government agencies.

The concept of a photo-essay comes from the discipline of photojournalism, a particular form of journalism that uses images to tell a news story.⁴ 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 direct and key message of the story is presented through the image.⁵

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.⁶

For applied science and health reports to use the medium of the photo-essay, a creative format is necessary that is not only informative but also interesting to follow and that quickly 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*, calling for photo-essays to combine 10-15 images with 200-500 words of accompanying text on topics relating to health and wellbeing.⁷ Areas covered by published examples include global health care delivery concepts; roles of health care providers; epidemiology of illness or injury; intervention to address a specific infectious disease, and how the World Health Organization (WHO)’s ‘Health-Promoting Schools’ provide an environment that can help advance the United Nations’ ‘Sustainable Development Goals’.⁸

- 4 Caple, H. & Knox, J.S. 2012. Online news galleries, photojournalism and the photo essay. *Visual Communication*, 11(2):207-36. [<https://doi.org/10.1177%2F1470357211434032>]; Marn, R. & Roldn, J. 20120. Photo essays and photographs in visual arts-based educational research. *International Journal of Education through Art*, 6(1):7-23. [https://doi.org/10.1386/eta.6.1.7_1]; Kobre, K. 1980. *Photojournalism: The Professionals’ Approach*. Somerville, MA: Curtin & London, Inc.
- 5 Knox, J.S. 2008. Reporting Bloodshed in Thai Newspapers: a comparative case study of English and Thai. In: Thomson, E.A. & White, P.R.R. (eds). *Communicating conflict: Multilingual case studies of the news media*. London: Continuum. 173-202.
- 6 Zelizer, B. 2005. Journalism through the Camera’s Eye. In: Allan, S. (ed). *Journalism: Critical Issues*. Maidenhead: Open University Press; Layton, R. 2011. *Editing and News Design: How to Shape the News in Print and Online Journalism*. South Yarra: Palgrave Macmillan.
- 7 International Journal of Epidemiology. 2020. *Instructions to Authors*. [https://academic.oup.com/ije/pages/Instructions_To_Authors].
- 8 Stothers, L. & Macnab, A. 2017. Global implementation of advanced urological care: Policy implementation research. *Canadian Urological Association Journal*, 11(6):157-60. [<https://doi.org/10.5489%2Fcuaj.4117>]; Mukisa, R., Macnab, A.J. & Stothers, L. 2017. Health promotion in low- and middle-income countries: ‘Youth Champions’ as agents for

Another style just relies on the graphic content of the images chosen; here a larger number of photos are combined, 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.⁹ 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. One example of this genre is the report of a digital photographic experiment prepared by archaeologists, combining elements of archaeological ethnography with photography.¹⁰ Anthropology is also a discipline where photographs and photographic evidence are relied on heavily for both the successful conduct of projects and comprehensive reporting. One essay describes how photographic documentation aided research conducted by an international team in refugee camps in Afghanistan; members of the team who had to remain remote from the project site for security reasons used photos taken in the camps to understand important cultural elements relevant to the research. Being remote enabled them to contribute effectively to the delivery and evaluation of this project, which employed an innovative male-centred intervention to address a cultural issue relevant to improving mortality and morbidity among mothers and infants in this vulnerable population.¹¹

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change. *Proceedings of the International Conference on Health and Disease*, 2:6-13. [<https://bit.ly/3lnDdwu>]; Stothers, L., Mutabazi, S., Mukisa, R. & Macnab, A.J. 2016. The burden of bladder outlet obstruction in men in rural Uganda. *International Journal of Epidemiology*, 45(6):1763-1766. [<https://doi.org/10.1093/ije/dyw285>]; Curry, T.J. & Strauss, R.H. 1994. A little pain never hurt anybody: A photo-essay on the normalization of sport injuries. *Sociology of Sport Journal*, 11(2):195-208. [<https://doi.org/10.1123/ssj.11.2.195>]; Macnab, A.J., Mukisa, R., Mutabazi, S. & Steed, R. 2015. Malaria in Uganda: school-based rapid diagnostic testing and treatment. *International Journal of Epidemiology*, 45(6), December 1759-1762. [<https://doi.org/10.1093/ije/dyw262>]; Macnab, A.J. & Mukisa, R. 2017. The UN Sustainable Development Goals: using World Health Organization's 'Health Promoting Schools' to create change. *Global Health Management Journal*, 1(1): 23-27. [<https://doi.org/10.35898/ghmj-1190>].

- 9 Peoples, G.E., Jezior, J.R. & Shriver, C.D. Caring for the wounded in Iraq – a photo essay. *New England Journal of Medicine*, 351(24):2476-2480. [<https://doi.org/10.1056/NEJMp048327>].
- 10 Hamilakis, Y., Anagnostopoulos, A. & Ifantidis, F. 2009. Postcards from the edge of time: Archaeology, photography, archaeological ethnography (a photo-essay). *Public Archaeology*, 8(2-3):283-309. [<https://doi.org/10.1179/175355309X457295>].
- 11 Aria, W., De Freitas, J., Francis, M. & Macnab, A.J. 2019. Engaging Afghan men at a societal level to increase women's access to contraception. *Medical Anthropology Theory*, 6(4):152-165 [<https://doi.org/10.17157/mat.6.4.732>].

Guidelines for composition

During the conduct or evaluation of a project, the taking of digital images must be a defined role of one member of the team, and the necessary consent forms must be prepared for those whose images will be recognisable in print, to give their informed written consent for these images to be used.

When preparing a report or executive summary consider including an image taken during a research or project delivery or stock images such as those available on Google images. Ensure that the images are:

- ☐ Interesting and add meaning and context to the topic of the essay;
- ☐ Objective and a fair and an accurate representation of the topic they depict in both content and tone;
- ☐ Complementary to each other and the written elements of the essay; and
- ☐ Informative, making the reader easily understand the facts and message of the essay.

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

- ☐ When putting the photo-essay together:
  - o Write the overview wording that describes the purpose of the essay.
  - o Select an image that illustrates the narrative.
  - o Write a caption for each selected image that describes the elements in the image that are relevant to the essay topic.
- ☐ When choosing images:
  - o Select high-resolution images for clarity in print versions of the essay or when viewed as an online publication.
  - o Use a photo editing programme to optimise contrast and lightness/darkness and extraneous crop detail.
  - o Avoid using poor quality images in terms of exposure, focus, white balance or distracting content.
- ☐ Include 10-15 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.

- Begin the essay with a general image or two 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 endpoint(s) and relevance of the message of the essay.
- Add an appropriate reference to the text and in a conventional reference list:
  - o Format the references and include them in the text as required by the journal chosen for the report – look at the instructions for authors.
  - o 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.
  - o Do not include references in the image captions as a rule. However, when the image or caption contains a particular fact or element of the essay, not included in the accompanying text, add a reference.
- Consider the ethics of the essay:
  - o 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.
  - o Most pictures are simply refined for contrast, colour 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.
  - o 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.

While only a small number of journals accept submission of photo-essays, this format is also an excellent one to use as the basis for a concise executive summary, to prepare a research presentation for a scientific meeting, or for materials intended to educate lay members of a target audience. 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, complementing 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 to take in the subject matter quickly is important in a world where we have less and less time to read entire articles and formal reports. Also, photo-essays appeal to an audience that is broader than fellow scientists or educators; the lay public can often learn a lot from a well-constructed photo-essay. After all, the principles employed have a good pedigree, as they are founded on the journalistic premise that a story must both engage the interest of a reader and allow rapid acquisition of information.

A recurring need with much of the DOHaD information we want to share is to describe ‘what works’, while also explaining ‘why’. Photographs can help in this regard by showing a level of detail about a problem and how it can be solved that would prove too lengthy and involved for many readers if we tried to present it using the written word alone. Also, the reality is that individual readers vary and they are interested in particular elements of what is presented. They want to take away different levels of information when learning ‘what works and why’. When any of us look at a photograph; what peak our interest and the impact thereof differs from person to person, meaning a photo-essay has the unique ability to ‘speak’ effectively to a much broader audience, with a much wider range of interests and life experience, than a written report or summary can usually achieve.

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, requiring 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 enough depth and quality has been compiled during the ‘planning’, ‘conducting’ and ‘evaluation’ phases of a project. For those who wish, however, considerable opportunities exist to be creative in the design and execution of photo-essays. Online publication lends itself to a faithful reproduction of full-colour images and video montages in large formats. However, the subjective review process to assess the merit of an

image-based submission, and its suitability for publication counterbalance this creative option.

An example follows of how images, captions and text can be combined to introduce the topic of the Sustainable Development Goals and how they can be advanced using school-based programmes based on the WHO's Health-Promoting School model.

Photo-essay

Advancing the Sustainable Development Goals through the WHO's Health-Promoting School programmes

The global relevance of the Sustainable Development Goals is implicit from the range of targets they address. The 17 Sustainable Development Goals overarchingly aim to address poverty worldwide.¹²

Figure 11.1 The United Nations Development Programme poster illustrates the 17 Sustainable Development Goals.

As Sustainable Development Goals 1-6 directly address factors that contribute to health, disease and wellbeing in children (poverty, malnutrition, health, education, empowering women and girls, and water), an innovative approach is to use the WHO's Health-Promoting School model to create change.¹³

12 United Nations (UN). 2020. *Sustainable Development Goals*. [www.un.org/sustainabledevelopment/sustainable-development-goals] (Accessed 4 March 2020).

13 World Health Organization (WHO). 2013. *What is a health promoting school?* [https://bit.ly/311Ovbn] (Accessed 4 March 2020); West, P., Sweeting, P. & Leyland, A. 2004. School effects on pupil's health behaviours: evidence in support of health promoting school. *Research Papers in Education*, 19(3), September:261-291.

Figure 11.2 Child malnutrition and disease are addressed specifically in Sustainable Development Goals 1 and 4.

School-based health promotion employs multi-disciplinary strategies to engage a school community. The WHO's ultimate objective is to generate life-long awareness of choice and behaviour, offering a way to influence the social determinants of health, positively.¹⁴ Health-Promoting School programmes have been used successfully to address many specific locally-identified diseases, living circumstances and lifestyles that negatively impact health, e.g. diarrhoea, dental caries, diet, hygiene, malaria, mental health, sexual health, and worms.¹⁵

[<https://doi.org/10.1080/02671522.2004.10058645>]; Tang, K.C., Nutbeam, D., Aldinger, C., St Leger, L., Bundy, D., Hoffmann, A.M., Yankah, E., McCall, D., Buijs, G., Arnaout, S. & Morales S. 2008. Schools for health, education and development: a call for action. *Health Promotion International*, 24(1):68-77. [<https://doi.org/10.1093/heapro/dan037>].

- 14 U.N., 2020; WHO, 2013; Tang et al., 2008; Viner, R.M., Ozer, E.M., Denny, S., Marmot, M., Resnick, M., Fatusi, A. & Currie, C. 2012. Adolescence and the social determinants of health. *The Lancet*, 379(9826):1641-1652. [[https://doi.org/10.1016/S0140-6736\(12\)60149-4](https://doi.org/10.1016/S0140-6736(12)60149-4)].
- 15 Macnab et al., 2015; Kwan, S.Y.L., Petersen, P.E., Pine, C.M. & Borutta, A. 2005. Health-promoting schools: an opportunity for oral health promotion. *WHO Bulletin*, 83(9):677-685. [<https://doi.org/S0042-96862005000900013>]; Migele, J., Ombeki, S., Ayalo, M. & Biggerstaff, M. & Quick, R. 2007. Diarrhea prevention in Kenyan school through the use of simple safe water and hygiene intervention. *American Journal of Hygiene and Tropical Medicine*, 76(2):351-353. [<https://doi.org/10.4269/ajtmh.2007.76.351>]; Mukisa, R., Macnab, A.J., Mutabazi, S. & Steed, R. 2017. Teachers as agents of change: school-based diagnosis of malaria positively impacts child morbidity. *Proceedings of the International Conference on Applied Science and Health*, 93-102. [<https://bit.ly/3pjRay0>]; Kirby D, Obasi A, Laris B. The effectiveness of sex education and HIV education interventions in schools in developing countries. *WHO Technical Report Series*, 938:103-150. [<https://bit.ly/3kqeJ4l>]; Paul-Ebhohimhen, V.A., Poobalan, A. &

Figure 11.3 A classroom in a school with a WHO's Health-Promoting School programme: the visual aids around the walls speak to health knowledge, factors that are protective and healthy behaviours.

The fundamental Health-Promoting School approach is suited to the Sustainable Development Goals as two synergistic educational principles drive change: the acquisition of knowledge via creative additions to the curriculum, and learning health-promoting behaviours through the conduct of school-based healthy practice exercises.

Figure 11.4 Visual aids made by pupils and the use of age-appropriate 'voice' and 'messaging' underscoring Health-Promoting School learning principles.

Van Teijlingen, E.R. 2008. A systematic review of school-based sexual health interventions to prevent STI/HIV in sub-Saharan Africa. *BMC Public Health*, 8(4). [<https://doi.org/10.1186/1471-2458-8-4>]; Miguel, E. & Kremer, M. 2004. Worms: identifying impacts on education and health in the presence of treatment externalities. *Econometrica*, 72(1): 159-217. [<https://bit.ly/3pdAxnH>].

Figure 11.5 Healthy practices being learned through sessions that teach and reinforce health-related skills (e.g. tooth brushing, hand washing, mosquito control, food cultivation, preparation and safe storage).

Health-Promoting School programmes, particularly in low- and middle-income countries, often include planting a school garden. It has been documented that school gardening contributes to improved nutrition and academic achievement, promotes healthier eating, enhances environmental awareness and fosters skill development in multiple fields.¹⁶ These skills, ranging from how to grow food and team building to commercial expertise from produce marketing, are all relevant to Sustainable Development Goals 1-6 and are accrued comparably worldwide.¹⁷

Figure 11.6 School gardens generate awareness of cultivation techniques, food security and sustainable agriculture and acquisition of life skills, in addition to growing produce.

16 Henry Doubleday Research Association. 2012. Food Growing in Schools – Taskforce Report. *Garden Organic*. Full Report. pp.1-66. [<https://bit.ly/3l9LTaa>].

17 Armstrong, D. 2000. A survey of community gardens in upstate New York: Implications for health promotion and community development. *Health and Place*, 6:319-327. [[https://doi.org/10.1016/s1353-8292\(00\)00013-7](https://doi.org/10.1016/s1353-8292(00)00013-7)].

Figure 11.7 School garden produce can be used in lunch programmes to supplement the nutrition of pupils who come to school hungry and can improve both health and educational attainment.

When a garden's produce is also used to feed children who come to school hungry, their educational achievement results improve, presumably reflecting the reversal of the effects of malnutrition on the cognitive behaviour of these children and their ability to learn.¹⁸ Hence, while local factors will drive the choice of crops schools will grow, the nutritional benefit of the produce chosen is relevant. In our Health-Promoting School programmes in Africa, we plant maize with iron-rich beans grown under the canopy; together these provide a good yield with a nutritious combination of complex carbohydrates, protein, and micronutrients. Recently we have successfully introduced a new orange-fleshed sweet potato varietal which is particularly rich in bioavailable nutrients including Vitamins A, B5, B6 and C.¹⁹

- 18 Macnab, A.J. & Kasangaki, A. 2012. 'Many voices, one song': a model for an oral health programme as a first step in establishing a health promoting school. *Health Promotion International*, 27(1):63-73. [<https://doi.org/10.1093/heapro/dar039>]; Bundy, D.A., Shaeffer, S., Jukes, M., Beegle, K., Gillespie, A., Drake, L., Lee, S.H., Hoffman, A.M., Jones, J., Mitchell, A. & Wright, C. 2006. School-based health and nutrition programs. In: Jamison, D.T., Breman, J.G. & Measham, A.R. (eds). *Disease Control Priorities in Developing Countries*. 2nd Edition. Washington, DC: The World Bank. 1091-1108.
- 19 Hotz, C., Loechl, C., De Brauw, A., Eozenou, P., Gilligan, D., Moursi, M., Munhaua, B., Van Jaarsveld, P., Carriquiry, A. & Meenakshi J.V. 2012. A large-scale intervention to introduce orange sweet potato in rural Mozambique increases vitamin A intakes among children and women. *British Journal of Nutrition*, 108(1):163-176. [<https://doi.org/10.1017/S0007114511005174>].

Figure 11.8 Sweet potatoes grow as an underground tuber on the plant *Ipomoea batatas*.

Figure 11.9 Orange fleshed varieties offer important nutritional benefits in low- and middle-income countries and contain high levels of beta-carotene.

Orange-fleshed sweet potato cultivation should be promoted as Vitamin A deficiency is prevalent in more than 50 per cent of countries worldwide, with more than 250 000 preschool children and many pregnant and lactating mothers affected.²⁰ Vitamin A deficiency weakens immunity, stunts growth, increases child and maternal mortality and is the most prevalent preventable cause of blindness worldwide; eating orange-fleshed sweet potato reduces rates of blindness.²¹

20 WHO. 2009. Global Prevalence of Vitamin A Deficiency in Populations at Risk 1995-2005: WHO Global Database on Vitamin A deficiency. *Nutrition*. [<https://bit.ly/3klCivl>].

21 WHO. 2020. *Vitamin A deficiency/ Micronutrient deficiencies*. [<http://www.who.int/nutrition/topics/vad/en/>] (Accessed 1 March 2020); Low, J.W., Arimond, M.,

When parents understand that micronutrients in fruit and vegetables improve child health and learning, and especially that they can prevent delayed reading, they are motivated to help plant and maintain school gardens.²² Parents and children then benefit by acquiring knowledge and skills side by side, and robust improvements in nutrition, food security, and sustainable agriculture are achievable.²³

Figure 11.10 Eating fruit and vegetables has known beneficial effects for health; increased awareness, production and consumption are fundamental aims of the Sustainable Development Goals.

The Sustainable Development Goals are a challenge, but importantly, the WHO now endorses school programmes as a way to address the social determinants of health worldwide.²⁴ Schools are recognised to provide the most effective and efficient way to reach a large segment of the population, and globally more than

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Osman, N., Cunguara, B., Zano, F. & Tschirley, D. 2007. A food-based approach introducing orange-fleshed sweet potatoes increased vitamin A intake and serum retinol concentrations in young children in rural Mozambique. *The Journal of Nutrition*, 137(5):1320-1327. [<https://doi.org/10.1093/jn/137.5.1320>].

22 Macnab & Kasangaki, 2012; Knai, C., Pomerleau, J., Lock, K. & McKee, M. 2006. Getting children to eat more fruit and vegetables: a systematic review. *Preventive Medicine*, 42(2):85-95. [<https://doi.org/10.1016/j.ypmed.2005.11.012>].

23 Pérez-Rodrigo, C. & Aranceta, J. 2001. School-based nutrition education: lessons learned and new perspectives. *Public Health Nutrition*, 4(1a):131-139. [<https://doi.org/10.1079/phn2000108>]; Macnab, A.J., Gagnon, F. & Stewart, D. 2014a. Health Promoting Schools: Consensus, challenges and potential. *Health Education*, 114(3):170-185. [<https://bit.ly/34szNmL>].

24 WHO. 2008. *Closing the gap in a generation: health equity through action on the social determinants of health*. Commission on Social Determinants of Health – Final Report. [<https://bit.ly/2QxIIAF>]; Marmot, M., Friel, S., Bell, R., Houweling, T.A. & Taylor, S. 2008. Closing the gap in a generation: health equity through action on the social determinants of health. *The Lancet*, 372(9650):1661-1669. [[https://doi.org/10.1016/S0140-6736\(08\)61690-6](https://doi.org/10.1016/S0140-6736(08)61690-6)].

one billion children have the potential to benefit from change created through Sustainable Development Goals-focused initiatives based on the WHO's Health-Promoting School model.

Figure 11.11 Vitamin A deficiency is the principal preventable cause of blindness. Orange sweet potato consumption preserves vision and is a nutritional adjunct that aids learning.

Figure 11.12 Education in safe and supportive schools is a powerful determinant of health.²⁵ Children engaged in effective WHO's Health-Promoting School initiatives will acquire knowledge and behaviours that are directly applicable to advancing the Sustainable Development Goals.

Conclusion

Photography is now more popular and accessible than ever due to the rapid development of digital photography and ubiquity of cameras in even the most basic cellular phones. There are many examples of useful resources that explain and illustrate how to take technically competent and visually engaging images.²⁶

25 Tang et al., 2008.

26 Collier, J. & Collier, M. 1986. *Visual Anthropology: Photography as a research method*. EPDF. [<https://bit.ly/3nfy1v8>]; Carol, H. 2015. *Read this if you want to take good photographs*. London: Laurence King Publishing.

Learning facts and forming opinions from photographs, or related images like film or videos is unlike being educated by the written word, and a daily occurrence globally for the majority of people.²⁷ Photographic images are more accessible than words in many parts of the world, particularly where populations include a significant number of people who remain illiterate or are not conversant with the principal languages in which academics write. Because of this, photos are a powerful way to furnish evidence; they can alter and enlarge the scope of what we see, and even provide an ethical subtext through what they depict, that is difficult to convey in words alone.

Care must be taken to make sure that the images selected are of high quality both in terms of resolution and the impact of the subject matter they depict, and consent must be obtained from the individuals in the photos who can be recognised in the versions used. Photographic images are a very effective and powerful way of communicating as they invoke emotion; hence, a potential pitfall when using them is that they can overtly or subliminally promote or perpetuate stereotypes; authors should be mindful of this when selecting images, and editors alert to the possibility when reviewing photo-essay submissions.

The photo-essay format has its origins in photojournalism, but a series of photographs is now an effective way to report advances in health and science, frame a report, or tell a story to a broad and varied target audience. As nothing holds a reader to look at the images in the order they are presented, nor indicates the amount of time to be spent on each image, a photo-essay offers a very individual, informative yet flexible format for sharing ‘what works and why’.

Hence, communicating scientific information and public health recommendations using photo-essays has broad relevance for disseminating policy implementation research.²⁸ In particular, as a way to respond to calls for DOHaD concepts to be translated into an accessible, multi-level approach for informing the next generation, and one that promotes DOHaD as a new and exciting way to achieve a healthier life.²⁹

27 Macnab, A.J. & Mukisa, R. 2018. Celebrity endorsed music videos: innovation to foster youth health promotion. *Health Promotion International*, 34(4), August:716-725. [<https://doi.org/10.1093/heapro/day042>];

28 Stothers, L. & Macnab, A. 2017. Global implementation of advanced urological care: Policy implementation research. *Canadian Urological Association Journal*, 11(6):157-160. [<https://doi.org/10.5489%2Fcuaj.4117>].

29 McKerracher, L., Moffat, T., Barker, M., Williams, D. & Sloboda, D. 2018. Translating the Developmental Origins of Health and Disease concept to improve the nutritional environment for our next generations: A call for a reflexive, positive, multi-level approach. *Journal of Developmental Origins of Health and Disease*, 10(4):420-428.

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