

Inoculation Postcards: Regarding W. Morgan's "SHOTS" as 1940s Health Communication

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Abstract

This study analyzes W. Morgan's "SHOTS," a World War II-era postcard published by A. D. Steinbach & Sons, Inc. of New Haven, Connecticut (USA), depicting a soldier receiving a vaccine while an observer watches with concern. "SHOTS" is an example of vintage postcard depictions of medical inoculations in general and military inoculations in particular. I argue that, like other inoculation postcards, "SHOTS" served not only an epistolary postal function but also a potential *inoculative* function, reflecting inoculation theory-informed health messaging to speak to attitudes and beliefs about vaccination and boosting some resistance to vaccine hesitation among some message recipients. This study offers an innovative, rhetorical application of a theory more often used to guide experimental investigations of health messaging strategies.

Keywords: vaccination rhetoric; inoculation theory; comics; persuasion; military communication; health communication

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Analyses of vaccination rhetoric often focus on the dangerous effects of mis- and disinformation (e.g., Compton et al., 2021) or ways to help people work through vaccine hesitancy (e.g., Chou & Budenz, 2020; Tagat et al., 2022). Another area of vaccine rhetoric that warrants exploration is vaccine visuals—image-based displays of vaccine mis- and disinformation, vaccine hesitancy, procedures, and other vaccination components (King & Lazard, 2020). This type of vaccine communication is the focus of the present analysis, which turns to an example of illustrative visual health communication (see King, 2015): a vintage postcard depicting a vaccination in progress through an illustrated scene. Illustrative health communication (like comics, which can serve as an “attractive vehicle for sharing public health information in an engaging way,” Kearns & Kearns, 2020, p. 140) has been studied across issues and contexts (see King, 2015, for a review). Still, health-based postcard images have received comparably little attention. This analysis examines A. D. Steinbach & Sons’ “SHOTS” postcard, which was illustrated by W. Morgan and part of the Series Soldier Comics—10 Subjects line of postcards in the 1940s.

Postcards

Postcards were popular—both as postal tools and as material for hobbies—especially in the United States between 1905 and the start of World War I (Mendelson, 2001), with more than 600 million postcards sent in 1907-08 alone, and soon after, around a billion postcards were sent each year (Ryan, 1982). Considering the potential complexities of postcards, scholars propose postcards are “a constitutive part of the way in which the business of art, commerce, history, and identity is negotiated on a daily basis” (Mendelson, 2001, p. 373) and Lear (2008) notes that “postcards are artifacts of several national phenomena, including changes in printing technology,

postal regulations, forms of communication, popular culture, and travel” (p. 77). Ali and Henin (2021) point out: “Nearly all objects, nations, celebrities, events and places have been documented in a postcard; therefore, picture postcards constitute the world’s complete visual records” (p. 335). Scholars have pointed to how postcards can “provide a visual understanding of place” (Combs, 2021a, p. 97; and see Bassett, 2021; Combs, 2021b; Hurt & Payne, 2019). Further, the postcard has more than a practical function; postcards are intertwined with emotion. As Baimuratova (2020) put it: “[P]ostcards carry the element of pleasant surprise of receiving them” (p. 282).

One category of postcards concerns issues of health, including depictions of hospitals. Hook (2005) analyzed hospital postcards and found:

These messages not only reveal information about illness and treatment, but are also interesting given our current society’s concerns about the confidentiality of health information. Here on these postcards, with names and addresses attached, are intimate details of the often grim reality of medical care. (p. 391).

Postcards, then, can reflect more than sites of travel and tourism destinations; some of them can also reflect the state of health care (Hook, 2005). It is this type of postcard that we turn to next. The next section offers an annotated description of the “SHOTS” postcard, which is followed by a discussion of how the visual health message might have functioned as a unique example of health messaging, including the potential of an inoculative (attitudinal) effect on vaccine hesitancy.

Description

W. Morgan's "SHOTS" (A. D. Steinbach & Sons, Inc. of New Haven, Connecticut, USA; 1940s era)

The sketch on the front of the card depicts three figures: a medical service person in full uniform (hereafter referred to as "the inoculator") and two soldiers, one receiving the vaccine ("the inoculated" and one observing the vaccine ("the observer"). The simple caption is centered at the bottom of the postcard: "SHOTS." The artist's name is in the bottom left-hand corner: W. MORGAN. The style of drawing resembles an etched sketch, and it is in monochrome, with parchment-colored paper and a pencil-like illustration (see Figure 1).

The inoculator stands in a position of authority. He is in full uniform, partially behind an examination table or cart, holding bottles, containers, and medical tools (e.g., forceps). The inoculator appears the same height as the other soldiers, if not a bit taller. He has one hand on the exposed arm of the inoculated, and the other holds a syringe. The syringe plunger is fully depressed, and the needle is inserted into the soldier's arm. His face is set: committed and focused on the injection site, demonstrating a concentrated facial expression.

The inoculated is placed in the middle of the scene. He stands with his shirt draped over his crooked left arm and positions his right arm to receive the injection—slightly bent at the elbow and angled toward the medical service person. His face is turned toward the injection, and he watches the process with an intense concentration. At the same time, he is composed and in control.

The observer stands partially behind the inoculated, and he peers over the inoculated's shoulder. The observer's hands are obscured by the inoculated, but based on the angle of his left arm, the observer's left hand is placed on or near the inoculated's left shoulder. The observer's

shirt is draped over his left arm, like the inoculated. The most noticeable thing about the observer is his facial expression. His eyes are open, his eyebrows arched, and his mouth is open as if in surprise, shock, or fear. He, too, is watching the injection.

In contrast to the others, the observer's hair is slightly messy, giving him a somewhat disheveled appearance. The observer contrasts the inoculator and the inoculated; instead of being composed and determined, the observer appears disturbed and uncertain. Watching the inoculation is unpleasant for this person.

Analysis: Inoculation Theory

A. D. Steinbach & Sons postcard “SHOTS,” illustrated by W. Morgan and part of the Series Soldier Comics—10 Subjects line of postcards in the 1940s, is—at least from one reading—a simple depiction of a standard medical procedure. One soldier receives a vaccine from a medical serviceperson, and another soldier looks on with concern. A closer reading, however, reveals some potential implications of this unique form of health illustrative messaging. Four of these possibilities are explored next.

1. Vaccination is an emotional experience for many. Chou and Budenz (2020) recommend considering the full range of emotional responses and participants, including possible fear and anger by the vaccine-hesitant and how enhanced self-efficacy can boost confidence (see also Simpson, 2018). We find a reflection of a full emotional range in “SHOTS.” The inoculator is focused and assured; the inoculated is focused and determined; the observer is concerned and apprehensive. In this seemingly simple sketch, we have a spectrum of composure, from determined to resolved to disturbed.

Of course, emotions can be more difficult to interpret than more specific, literal health messaging. Consider, for example, an alternative reading of the scene displayed on “SHOTS.”

Instead of reading the look of concern and apprehension on the face of the observer, one could instead interpret the tableau as humorous. A look of fear on the observer's face contradicts the expected bravery of a soldier, and this dissonance elicits an amusing reaction. In that case, the messaging would have different effects. Moyer-Gusé and colleagues (2018), for example, showed how humorous MMR (measles, mumps, rubella) vaccine messaging had different effects than non-humorous messaging, with humorous messages reducing vaccine hesitancy. Then again, the illustration style used on "SHOTS"—a pencil-like, realistic sketch on parchment-colored paper—might not lend itself to a humorous interpretation (see Simpson, 2018).

Alternatively, the postcard sketch functions more as a type of fear appeal. One imagines this rhetorical function might occur if the postcard recipients were to relate more to the observer than the inoculator or inoculated. It would also be helpful to know if images like "SHOTS" function as fear appeals in general and health image fear appeals in particular (see King, 2015, for a review of images and fear appeals). Does the mere visual depiction of vaccination trigger fear?

We could also consider how "SHOTS" could be a guide for strategic, intentional health visual images of inoculation. For example, instead of showing the moment of vaccination—the needle entering the arm—and a distraught witness, a health visual of inoculation could portray a relieved inoculated individual, post-inoculation, or someone with more confidence post-inoculation, secure in the knowledge that they were now more protected against viral threats. Such a visual display would be consistent with advice from experts on promoting calmer vaccination experiences, including avoiding showing illustrations of inserted needles (see Wells-Morris, 2021). This seems to be an approach the Centers for Disease Control uses in some of their vaccination illustrations. For example, one photographic image shows a vaccination in

progress (see Figure 2). Four of the five people portrayed in the image are smiling, and the observer, who is not smiling, has a calm expression. In another example, a photograph features three people, and all are smiling: the inoculator, the inoculated, and the observer (see Figure 3).

2. The mode of health communication messaging (in this case, postcard-as-mode) needs a specific focus in health communication analyses. A postcard has attributes that make it unique. Consider, for example, the size of a postcard—small with restricted size to allow for postal use. Such a size is conducive to a visual health message; as King and Lazard (2020) observe, “illustrations can uniquely and efficiently communicate emotion and context in small spaces, such as a single social media post” (p. 1725). We might conclude similarly that such images can function in the small space of a single postcard. Additionally, the postcard mode is well-suited for shorter, terse messages—an area of interest for persuasion scholars in general (e.g., Mollen et al., 2017) and inoculation theory researchers in particular (e.g., Geegan, Ivanov, & Parker, 2023).

The postal component of a postcard also warrants further consideration. Epistolary messages, in general, sit at a unique intersection of the public and private since “in the course of communication by letter, postcard, and email readers construct an imaginary, incorporeal body for their correspondents” (Milne, 2012, p. 2). Or, as Segal (2019) puts it: “The language used is a language of gap-closing, of speaking to the addressees as if they were present” (p. 241). With the dialogic and relational components of epistolary communication in mind, we can view the exchange of postal messages as something more (inter)personal than might be initially considered with a static medium. Interpersonal communication theories and conceptual models could add further insight into how postal health communication functions, including Family Communication Patterns Theory (FCPT; see Koerner & Fitzpatrick, 2002a, 2002b).

It is unclear whether contemporary postcards would have the same persuasive effect(s) as vintage postcards. Health communication analyses have found that perceived source credibility of the source of an inoculation message can reduce vaccine hesitancy among vaccine-hesitant parents (Xu et al., 2021). What remains unclear is whether the mode of communication—in this case, a postcard—influenced vaccine messaging—and whether a similar contemporary postcard would do the same. The popularity of postcards has undoubtedly waned since “SHOTS” was published.

3. Illustrative visual health communication warrants a specific focus on the visuals themselves. Consider, for example, the prominent display of faces in the “SHOTS” illustration. Simpson (2018) observes that

depictions of faces can allow readers to infer the mental states of characters, empathize with the depicted characters, and arrive at emotionally salient judgments regarding the characters’ psychological and behavioral tendencies. (para. 26)

Furthermore, Simpson (2018) observes, “Iconic representations of characters allow opportunities for readers to have emotional contagion responses to depictions of emotionally salient facial cues” (p. 28). We might imagine, then, that the prominent display of faces—two with shared characteristics (the determination of the inoculator and inoculated) and one with a contrasting visage (the uncertainty and apprehension of the observer)—was a key takeaway of “SHOTS” for message recipients, resulting in potential identification with any of the characters or, somewhere in between.

The exceptionally brief caption, “SHOTS,” also starkly contrasts the postcard’s more substantive illustrative features. Captions often have a vital role on a postcard since “text in the form of captions directs our gaze, tells us what to look for” (Prochaska, 2001, p. 393). Then

again, despite its brevity, it is notable that the caption is in all capitalized letters (“SHOTS”) and uses a dynamic euphemism for vaccination. Biss (2014) points out: “The British call [vaccination] a ‘jab,’ and Americans, favoring guns, call it a ‘shot.’ Either way, vaccination is a violence” (pp. 12-13). The violence-focused term “SHOTS” is given a prominent place on the card (centered) and stands alone as the only text-based messaging on the card, apart from the illustrator’s signature.

4. Inoculation theory might offer a beneficial way to think about health visuals. Kearns and Kearns (2020) note:

Stories can be crafted to encourage a particular response, e.g., concern when a characters [sic] actions put lives in danger, or joy in response to a healthy recovery. Key for public health interventions, behaviours can be modelled and their long-term outcomes connected in an emotionally engaging but safe environment, allowing readers to learn from both positive and negative examples. (p. 140)

Regarding vaccine confidence, we might characterize the behavior of the inoculated as “positive” and the observer’s behavior as “negative.” If that is the case, we might extrapolate that the observer is offering a counterargument to vaccine confidence (“Vaccines are scary,” or “We should be apprehensive about vaccines”). The inoculated and inoculator are providing refutations (“We can approach vaccines with calmness” or “We should be confident about vaccines”).

We can take this process one step further. If the visuals function as counterarguments and refutations, then we might have the components of an attitudinal inoculation message at work. Inoculation theory—the classic theory of resistance to influence (see Compton, 2013; McGuire, 1964)—explains how a position (e.g., an attitude, a belief) can resist future challenges through preexposure to weakened challenges. It gets its name from an analogic connection to medical

vaccines, which conventionally motivate the body to produce antibodies (protection) by pre-exposing them to weakened versions of the virus (Compton, 2013; McGuire, 1964). Research shows that when some counterarguments are raised and refuted, the inoculation treatment extends protection against a range of counterarguments, including those not mentioned in the inoculation treatment message (Banas & Rains, 2010). Inoculation theory has been successfully applied in various contexts and issues, including health (see Compton et al., 2016, for a review).

Future research should assess whether raising and refuting fears about shots, which seems to be portrayed in “SHOTS,” would also protect against other components of vaccine hesitancy. Looking specifically at compulsory pre-deployment vaccines in the military, Polak et al. (2011) identified that vaccine safety and need were top concerns. Might these concerns be alleviated by being preemptively raised and refuted; that is, could one attitudinally inoculate against negative responses to visual depictions of medical inoculations, much like inoculation-based messages can inoculate against text-based vaccination challenges (e.g., Wong, 2016; Wong & Harrison, 2014)?

Conclusions

Postcards can carry rich meaning. They can be complex (Mendelson, 2001). So, too, can the relationship between recipients and postcards, and scholars and postcards. As Mendelson (2001) notes of postcard studies in art history,

Postcard studies implicate the author in ways that perhaps other media may not. The postcard disallows disinterested analysis because as historians dealing with these objects

we cross the line that has been drawn between realms of culture considered worthy of public interest and those that are more often associated with private passions. (p. 374)

Several limitations are inherent to postcard analysis, including difficulties in determining dates, publishers, and intent (Lear, 2008). Nevertheless, the postcard— “an exchange object, a gift, and a message carrier” (Rogan, 2005, p. 2)—can do and communicate a lot, if we are willing to take a closer look. An innovative application of a theory typically used to guide experimental investigations can offer a new perspective on health communication.

References

- Ali, M., & Henin, E. (2021). Dating vintage hand-colored real photo postcards: A review and applied study. *International Journal of Conservation Science*, *12*(2), 335–348.
- Baimuratova, U. S. (2020). Postcrossing project: Postcards as a new form of speech communication. *European Proceedings of Social and Behavioural Sciences*, 281-293.
DOI: 10.15405/epsbs.2020.04.02.31
- Banas, J., & Rains, S. (2010). A meta-analysis of research on inoculation theory. *Communication Monographs*, *77*(3), 281-331. <https://doi.org/10.1080/03637751003758193>
- Bassett, F. (2021). Wish you were here!: The story of the golden age of picture postcards in the United States. <https://www.nysl.nysed.gov/msscfa/qc16510ess.htm>
- Biss, E. (2014). *On immunity: An inoculation*. Graywolf Press.
- Chou, W. Y. S., & Budenz, A. (2020). Considering emotion in COVID-19 vaccine communication: addressing vaccine hesitancy and fostering vaccine confidence. *Health communication*, *35*(14), 1718-1722. <https://doi.org/10.1080/10410236.2020.1838096>
- Combs, H. J. (2021a). "Selling" Nebraska through Archer King's exaggeration postcards. *Material Culture*, *53*(1), 79–101.
- Combs, H. J. (2021b). T. A. Carlson's real photo postcards: Promoting the American dream in Nebraska. *Great Plains Quarterly*, *41*(1), 5–27.
- Compton, J. (2013). Inoculation theory. In J. P. Dillard & L. Shen (Eds.), *The Sage handbook of persuasion: Developments in theory and practice* (2nd ed.; pp. 220–236). Sage.
<http://dx.doi.org/10.4135/9781452218410.n14>

- Compton, J., Jackson, B., & Dimmock, J. A. (2016). Persuading others to avoid persuasion: Inoculation theory and resistant health attitudes. *Frontiers in Psychology*, 7(122).
<https://doi.org/10.3389/fpsyg.2016.00122>
- Compton, J., van der Linden, S., Cook, J., & Basol, M. (2021). Inoculation theory in the post-truth era: Extant findings and new frontiers for contested science, misinformation, and conspiracy theories. *Social and Personality Psychology Compass* (15), 1-16.
<https://doi.org/10.1111/spc3.12602>
- Geegan, S., A., Ivanov, B., & Parker, K. A. (2023). Inoculating within character limits: Terse messages to promote Gen Z mental health. *The Journal of Communication and Media Studies*, 8(2). <https://doi.org/10.18848/2470-9247/CGP/v08i02/65-86>
- Hook, S. A. (2005). You've got mail: Hospital postcards as a reflection of health care in the early twentieth century. *Journal of the Medical Library Association*, 93(3), 386.
- Hurt, D., & Payne, A. (2019). Postcard imagery and geographical imagination along the Lincoln Highway. *Material Culture*, 51(1), 1–20.
- Kearns, C., & Kearns, N. (2020). The role of comics in public health communication during the COVID-19 pandemic. *Journal of Visual Communication in Medicine*, 43(3), 139–149.
<https://doi.org/10.1080/17453054.2020.1761248>
- King, A. J. (2015). Visual messaging and risk communication. In H. Cho, T. Reimer, & K. A. McComas (Eds.), *Sage handbook of risk communication* (pp. 193–205). Sage.
- King, A. J., & Lazard, A. J. (2020). Advancing visual health communication research to improve infodemic response. *Health Communication*, 35(14), 1723-1728.
<https://doi.org/10.1080/10410236.2020.1838094>
- Koerner, A. F., & Fitzpatrick, M. A. (2002a). Toward a theory of family communication.

- Communication Theory*, 12, 70-91. <https://doi.org/10.1111/j.1468-2885.2002.tb00260.x>
- Koerner, A. F., & Fitzpatrick M. A. (2002b). Understanding family communication patterns and family functioning: The roles of conversation orientation and conformity orientation. *Communication Yearbook*, 26, 37-68. <https://doi.org/10.1080/23808985.2002.11679010>
- Lear, B. A. (2008). Wishing they were there: old postcards and library history. *Libraries & the Cultural Record*, 43(1), 77–100.
- McGuire, W. J. (1964). Inducing resistance to persuasion: Some contemporary approaches. In L. Berkowitz (Ed.), *Advances in experimental social psychology* 1, (pp. 191–229). New York: Academic Press. [https://doi.org/10.1016/S0065-2601\(08\)60052-0](https://doi.org/10.1016/S0065-2601(08)60052-0)
- Mendelson, J. (2001). Introduction: Postcards from albums to the academy?. *Visual Resources*, 17(4), 373-382. <https://doi.org/10.1080/01973762.2001.9658603>
- Milne, E. (2012). *Letters, postcards, email: Technologies of presence*. Routledge.
- Mollen, S., Engelen, S., Kessels, L. T., & van den Putte, B. (2017). Short and sweet: the persuasive effects of message framing and temporal context in antismoking warning labels. *Journal of Health Communication*, 22(1), 20-28. <https://doi.org/10.1080/10810730.2016.1247484>
- Morgan, W. (n.d.). SHOTS. A. D. Steinbach & Sons, Inc. [postcard]
- Moyer-Gusé, E., Robinson, M. J., & Mcknight, J. (2018). The role of humor in messaging about the MMR vaccine. *Journal of Health Communication*, 23(6), 514–522. <https://doi.org/10.1080/10810730.2018.1473533>
- Polak, S., Riddle, M. S., Tribble, D. R., Armstrong, A. W., Mostafa, M., & Porter, C. K. (2011). Pre-deployment vaccinations and perception of risk among US military personnel. *Human Vaccines*, 7(7), 762–767. <https://doi.org/10.4161/hv.7.7.15574>

Prochaska, D. (2001). Thinking postcards. *Visual Resources*, 17(4), 383-399.

<https://doi.org/10.1080/01973762.2001.9658604>

Rogan, B. (2005). An entangled object: The picture postcard as souvenir and collectible, exchange and ritual communication. *Cultural Analysis*, 4(1), 1–27.

Ryan, D. (1982). *Picture postcards in the United States*. Potter.

Segal, Z. M. (2019). *The political fragmentation of Germany*. Palgrave.

Simpson, W. (2018). Feelings in the gutter: Opportunities for emotional engagement in comics.

ImageTextT. <https://imagetextjournal.com/feelings-in-the-gutter-opportunities-for-emotional-engagement-in-comics/>

Tagat, A., Kapoor, H., Arora, V., Chakravarty, S., Mukherjee, S., & Roy, S. (2022). Double jab: Survey evidence on vaccine hesitancy, beliefs, and attitudes in India. *Health*

Communication, 1–12. <https://doi.org/10.1080/10410236.2022.2028480>

Wells-Morris, P. (2011, September 29). Calm vaccination experiences: Strategies to help manage fear of pain and needles. *New Zealand Doctor*. <https://www.nzdoctor.co.nz/node/19804>

Wong, N. C. (2016). “Vaccinations are safe and effective”: Inoculating positive HPV vaccine attitudes against antivaccination attack messages. *Communication Reports*, 29(3), 127–138. <https://doi.org/10.1080/08934215.2015.1083599>

Wong, N. C. H., & Harrison, K. J. (2014). Nuances in inoculation: Protecting positive attitudes toward the HPV vaccine and the practice of vaccinating children. *Journal of Women’s Health, Issues and Care*, 3(6). doi:10.4172/2325-9795.1000170

Xu, Y., Margolin, D., & Niederdeppe, J. (2021). Testing strategies to increase source credibility through strategic message design in the context of vaccination and vaccine

hesitancy. *Health Communication*, 36(11), 1354-1367.

<https://doi.org/10.1080/10410236.2020.1751400>

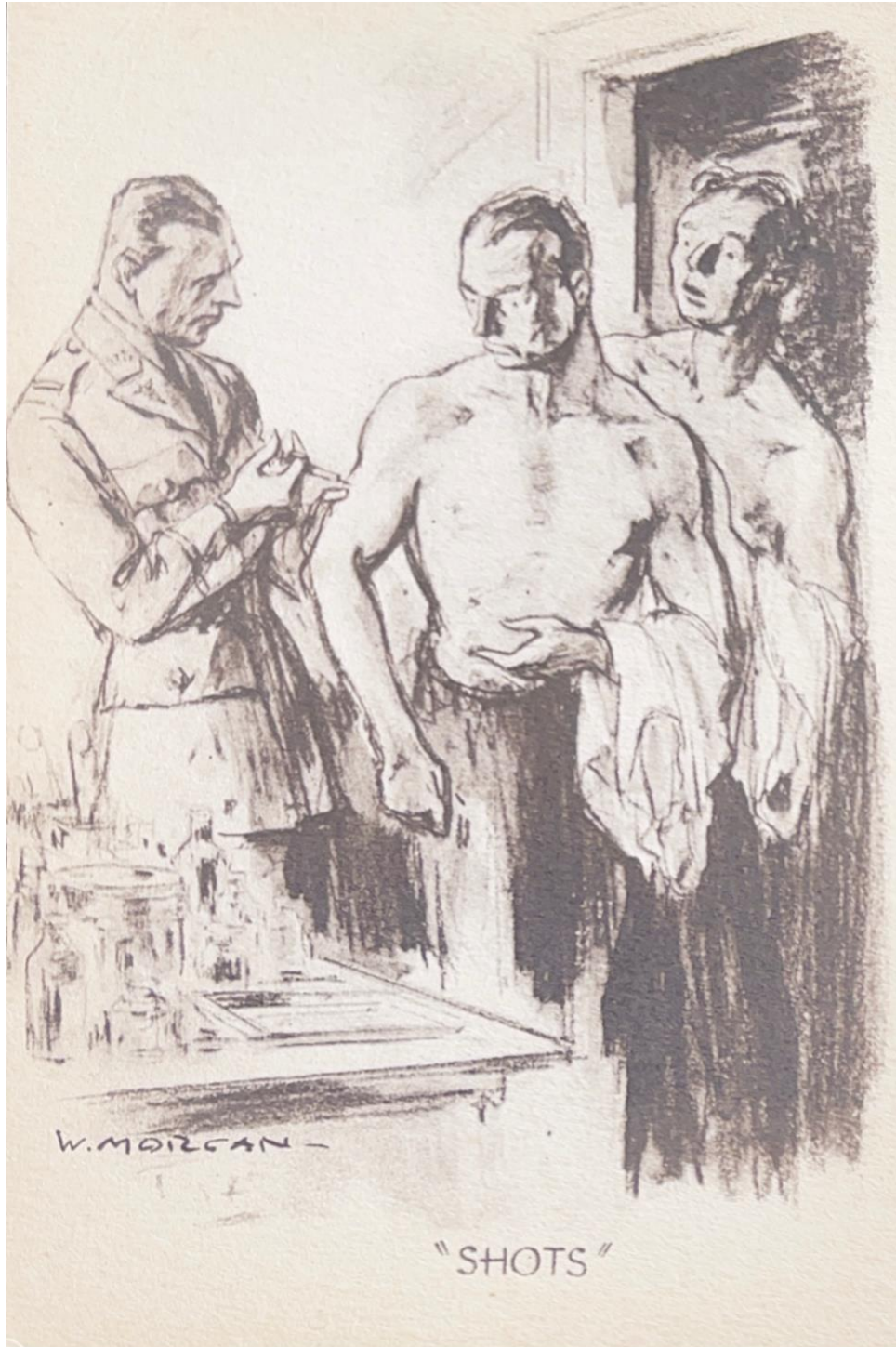


Figure 1. W. Morgan's "SHOTS" (A. D. Steinbach & Sons, Inc. of New Haven, Connecticut, USA; 1940s era)



Figure 2. Source: Centers for Disease Control and Prevention. Available:

<https://www.immunize.org/photos/vaccination-photos.asp>



Figure 3. Source: Centers for Disease Control and Prevention. Available:

<https://www.immunize.org/photos/vaccination-photos.asp>