The Physician’s White Coat: *History, Symbolism and Practice*

Brian Elkins, M.D., FAAFP
The Physician’s White Coat

- What are its historical origins?
- What are the benefits of wearing it?
- What are the disadvantages of wearing it?
- What does the white coat mean today?
Sources

- Why do we wear the white coat?  (July, 2006)

ment: the jaundice diminished, and bile reappeared in considerable quantity in the motions. But about Nov. 19th the vomiting became more acute, and the jaundice increased. On Nov. 19th the left boil was loculated to be much swollen, and lived lines marking the course of the lymphatics passed up this boil. On Nov. 19th an abscess was opened above the left nipple, from which fluid pus and gas escaped. On the same day he was seized with a fit of convulsions, followed by coma. These fits occurred in rapid succession, so that he had ninety-three minutes before his death at five a.m. on Nov. 21st.

On examination of the body after death, the brain and its membranes were found to be riddled, except that there was a considerable amount of fluid, which contained a small quantity of black matter, and in the lateral ventricles. The kidneys were considerably enlarged, and there was much fatty and granular deposit in the secreting cells. The liver was large, and weighed 80 lbs.; its secreting cells were loaded with oil; the biliary ducts were unusually distinct, giving a granular appearance to the organ on section. The gall-bladder contained a solid, black, necrotic concretion, as large as a walnut, and easy small, irregularly-shaped fragments of the same material. There were vessels in a small quantity of dark-green fluid fluid, which was of a brownish, opaque, bloody appearance. In examination, was found to contain a large number of pus-corpuscles. The mucous surface of the gall-bladder had a stretched, white appearance, and the fundus was deeply injected, granular, and exorciated. The bile-ducts contained a similar vivid fluid to that in the gall-bladder, with some small mass of black impregnated bile. This could be poured into the duodenal without much difficulty. The venous membranes of the stomach and duodenum were minutely injected with numerous small coagula, and the surface was coated with much vivid mucus. There was great tenderness and rigidity of both lobes. Fat was deposited in large quantity throughout the body, and all the soft tissues were deeply jaundiced.

The examination made it clear that the fatal result was due to uraemia, while it also showed that the hepatic symptoms were probably the result of septic of the gall-bladder and bile-ducts, excited by the gallstones, which was septic before death.

In the case from which this description was obtained, there was painful enlargement of the gall-bladder and jaundice, arising from obstruction of the duct caused by extraction of a cholesterol album.

Case 1.—James B., aged sixty-nine, a coachman, was admitted, under Dr. Stewart, on May 4th, 1861. He was in the exception of a similar but less severe attack some years before, he had enjoyed good health until four months before admission, when he had been suddenly seized with severe pain in the right hypochondrium, swelling of the right side, and sudden fever. After a few days his skin became jaundiced, and he had great discomfiture. The jaundice increased in severity, but the formation diminished. Lassitude had suffered from the palpitation in the cardiac region and labelling in the head, and he had lost both flesh and strength.

On admission, the patient was帷帐 and feeble; the pulse was 72, and irregular; the whole skin and the conjunctiva were bright yellow. The patient complained of a dull pain in the region of the liver, the discharge from which appeared considerably increased, measuring upwards of five inches in the right upper angle. On more careful examination, it was ascertained that this enlargement was limited to the situation of the gall-bladder, and that posteriorly the hepatic diazema was diminished. The patient was treated with alkalis, ammonium vegetable bitter, and stimulants; but his jaundice rapidly increased, and on May 19th he died from exhaustion.

In the autopsy, the liver was found to be small, pale, and flabby. Its lower margin did not reach as far as the edge of this side. The gall-bladder was about four times the normal size, and was filled with a colliculus, cloudy fluid, destitute of any tint of bile. The body, hepatic and common ducts were all enormously dilated, the common duct being larger than one's finger, and all were filled with a colliculus fluid, similar to that in the gall-bladder. The bile ducts were the arteries of the liver were greatly dilated as far as the outer surface, and filled with a similar fluid, which flowed out when the liver was cut into. There was no calculus in the gall-bladder or any of the ducts but the crural of the common duct in the duodenum was completely blocked up. The common ducts at this part were considerably thickened, forming a simple like prominence at the edge of the hollow, and around this the mucous membrane had a raised, puckered appearance, as if from the obstruction of its lumen. There was a hole in the aorta of the aorta of the spleen and of the veins of the heart. The prostate was enlarged, the bladder inflamed, and the kidneys granular, with distention of the pelvis and calices.

The contraction of the liver in this case was, no doubt, due to the long duration of the obstruction, the hepatic tissue having become atrophied from the pressure of the permanently distended bile-ducts.

ON THE ANTISEPTIC PRINCIPLE IN THE PRACTICE OF SURGERY.*

By JOSEPH LISTER, Esq., F.R.S.,
PROFESSOR OF SURGERY IN THE UNIVERSITY OF EDINBURGH.

To the course of an extended investigation into the nature of inflammation, and the healthy and morbid conditions of the blood in relation to it, I arrived several years ago, at the conclusion that the essential causes of suppuration in wounds in decomposition, brought about by the influence of the atmosphere upon blood or serum remained within them, and in the case of contused wounds, upon portions of tissue destroyed by the violence of the injury.

To prove the occurrence of the suppurative, with all its attendant risks, an object manifestly desirable; but till lately apparently unattainable, since it seemed hopeless to attempt to exclude the oxygen, which was universally regarded as the agent by which putrefaction was effected. But when it had been shown by the researches of Pasteur that the septic property of the atmosphere depended, not on the oxygen or any gaseous constituent, but on minute organisms suspended in it, which owed their energy to its vitality, it occurred to me that decomposition in the injured part might be avoided without excluding the air, by applying as a dressing some material capable of destroying the life of the floating particles.

Upon this principle I based a series of experiments which I will now attempt to give a short account.

The material by means of which inorganic acid, a volatile organic compound, which appears to exercise a peculiarly destructive influence upon low forms of life, and hence in the most powerful antiseptic which we are at present acquainted.

In the first class of cases in which I applied it was that of compound fractures, in which the effects of decomposition in the injured part were especially striking and permanent. The good results have been such as to establish conclusively the great principle, that all the local inflammatory mischief and general fetid disturbance which follow serious injuries are due to the irritating and poisonous influence of decomposing blood or tissue. For these evils are entirely avoided by the anti septic treatment, so that limbs which otherwise would be unhesitatingly condemned to amputation may be retained with confident expectation of the best results.

In conducting the treatment, the first object must be the destruction of any septic germ which may have been introduced into the wound, either at the moment of the accident or during the time which has since elapsed. This is done by introducing the acid of full strength into all accessible recesses of the wound by means of a piece of rag held in dressing forceps and dipped in the liquid. This did not venture to do in the earlier cases; but experience has shown that the compound carbolic acid and forms with the blood, and any portions of tissue killed by its antiseptic action, including every part of the bone, are disposed of by absorption and organisation, provided they are afterwards kept from decomposing.

We saw, therefore, to employ the antiseptic treatment efficiently at a period after the occurrence of the injury at which it would otherwise probably fail. Thus have I now under treatment in the Glasgow Infirmary a boy who was admitted with compound fracture of the leg late at night and a half hours after the accident, in whom nevertheless all local and constitutional disturbance was avoided by means of carbolic acid, and the bones were freely united five weeks after his admission.

The next object to be kept in view is to guard against the spreading of decomposition into the wound along
Joseph Lister konstruerade en apparat som sprutade karbolsyra över operationssåret medan läkarna arbetade. Bild från 1882.
THE PRINCIPLES AND PRACTICE OF MEDICINE

DESIGNED FOR THE USE OF PRACTITIONERS AND STUDENTS OF MEDICINE

BY

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NEW YORK
D. APPLETON AND COMPANY
1892
MEDICAL EDUCATION
IN THE
UNITED STATES AND CANADA
A REPORT TO
THE CARNEGIE FOUNDATION
FOR THE ADVANCEMENT OF TEACHING
BY
ABRAHAM FLEXNER
WITH AN INTRODUCTION BY
HENRY S. PRITCHETT
PRESIDENT OF THE FOUNDATION

BULLETIN NUMBER FOUR (1910)
(Reproduced in 1960)
(Reproduced in 1978)

437 MADISON AVENUE,
NEW YORK CITY 10022
The Flexner Report (1910)

- The AMA created the Council on Medical Education in 1904
- Asked the Carnegie Foundation to survey U.S. medical education
- Abraham Flexner visited all 155 medical schools in the U.S.
- The report was highly critical and led to closure of many schools
The White Coat Ceremony

Patrice Alves being cloaked by Dr. Sandra O. Gold at the first White Coat Ceremony, in 1993. Dr. Alves graduated in 1997 and is now an internist in San Antonio. Photo by Charles Manley.
The White Coat Ceremony

- First held at the Columbia College of Physicians and Surgeons in 1993
- Now held at 99% of all LCME-accredited medical schools in the U.S.
The Arnold P. Gold Foundation’s…

overarching goal is to create the Gold Standard in healthcare – compassionate, collaborative and scientifically excellent care – to support clinicians throughout their careers, so the humanistic passion that motivates them at the beginning of their education is sustained throughout their practice. We strive to ensure that care and respect always govern the relationship between practitioner and patient.
Physicians subordinate their own interests to the interests of others.

Physicians adhere to high ethical and moral standards.

Physicians respond to societal needs, and their behaviors reflect a social contract with the communities served.
Defining Professionalism (2/3)

Swick, Acad Med, June 2000

- Physicians evince core humanistic values, including honesty and integrity, caring and compassion, altruism and empathy, respect for others, and trustworthiness.
- Physicians exercise accountability for themselves and for their colleagues.
- Physicians demonstrate a continuing commitment to excellence.
Physicians exhibit a commitment to scholarship and to advancing their field.

Physicians deal with high levels of complexity and uncertainty.

Physicians reflect upon their actions and decisions.
Professionalism begins with proper dress, punctuality, good manners and dependability. On a higher level, add collegialism reflected in respect for nurses, medical colleagues and consultants. At the core is benevolence toward the patient.
Reasons we don the white coat…

- We aspire to it as we aspire to the profession
  Symbolizes medicine
  We’ve arrived
  Identity
- Pockets!
Imposter syndrome

“I see my coat and stethoscope hanging on the door each morning and I feel like I don’t deserve them. I'm not intelligent enough. Not clever enough. Not charming enough. This is supposed to be a uniform worn with dignity and honor, but it feels like a daily-wear Comic-Con costume with authentic accessories, worn by someone who can only hope to play at being a doctor.”

~ Ben
But, some do not wear it…

- Pediatricians and psychiatrists
- Infectious disease specialists
- British physicians
Physician Attire

THE LAST WORD

Dressed to Ill

If a shirt and tie are too formal and jeans and a T-shirt are too casual, what’s a doctor to do?

Bobby J. Newbell, MD

The late 19th century oil painting The Doctor by Sir Luke Fildes portrays a physician keeping watch at his patient’s bedside while wearing a suit and tie. The better known 1875 painting by Thomas Eakins called The Gross Clinic depicts the authoritative figure of Dr. Samuel D. Gross supervising a surgery. Dr. Gross and his colleagues look like Gilded Age robber barons in their black business suits. To the modern eye, the image of physicians wielding surgical instruments with blood-stained hands while wearing formal Victorian garb seems almost comical. The same might be said for how contemporary physicians dress.
“Unisex, featureless, strictly utilitarian, pajama-like clothes that cover the maximum area with minimum material, **scrubs are the ultimate triumph of function over style.** Hanging on the thin, straining on the corpulent, scrubs are democratic in their indignity to the human form.”
“Scrubs are a metaphor for modern medicine: pragmatism and expedience stripped of all vestiges of romance and mystique. They will probably reign supreme over medical apparel for the next thousand years. But I doubt they'll find their way into oil paintings that anyone will take seriously.”
Do patients care?

- Quite a few studies with conflicting results
Studies on Patient Preferences for Physician Attire


  “Patients prefer white coats, and they contribute to greater comfort and confidence in their physicians....”
Studies on Patient Preferences for Physician Attire

  
  “Patients prefer a traditionally dressed physician as opposed to one who is dressed more casually.”

  
  “Patients expect surgeons to be dressed in a white coat with a nametag and to be addressed by their surname. Patients do not want their surgeon dressed in blue jeans.”


  Short answer: No.
Studies on Patient Preferences for Physician Attire


  “Although patients often prefer formal physician attire, perceptions of attire are influenced by age, locale, setting and context of care.”
HOW TO ROLL YOUR SLEEVES

by hooplah

1  2  3

LOOKIN' GOOD
Infection risk

- White coats harbor infectious bacteria and tend to be laundered infrequently.
- In 2008 the British National Health Service instituted a “bare below the elbows” (BBE) policy for hospitals.
- No randomized controlled trial has shown reduction of infections by banning white coats.
Do You Really Want to See Your Doctor’s Elbows?

BY TARA PARKER-POPE  SEPTEMBER 8, 2008 11:50 AM

Do clothes make the doctor? Or do they just increase infection rates? That’s the debate that is brewing in England, where new rules about doctors’ attire are raising questions about clothing and patient confidence.

Susanna  September 8, 2008 · 12:42 pm

Why not have physicians wear disposable paper dresses?
Summary…

- Prior to the late 19th century, physicians wore black, similar to clergy.
- Antisepsis and the rise of scientific methods in medicine led to the shift to white coats.
- Ironically, a debate now rages about risk of transmitting infections from white coats.
Summary…

- Today the white coat is symbolic of humanism and professionalism in medicine.
- Patients sometimes prefer the white coat to more casual dress, but this is highly variable.
Full disclosure: I now rarely wear a white coat

- It’s hot in the summertime
- I find it uncomfortable
- Cleanliness is an issue
- I think it contributes to scariness of the doctor’s office
  …Even though it doesn’t seem to impact “white-coat hypertension”
Why do we wear the white coat?

By Brian Elkins, M.D.

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