The Doctor’s Multi-instrument Tool of the Future?

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It is just another day in 2020, except that the eyes of the medical world are eagerly awaiting the latest invention to be revealed: the ingenious multi-instrument pocket tool. Precision, quality, functionality and versatility are what this invention promises to deliver. Be it to perform intricate ‘snips and snaps’, escape from an Iraqi P.O.W camp, or to cut excess bandages or tape in the hospital, this amazing tool will be designed to function perfectly on virtually every occasion.

This multi-purpose tool, based on the unique Swiss pocket knife design which has proven its worth, will no doubt be carried to the furthest reaches of the earth and to her highest peaks. It would not be surprising if it also orbits the earth as standard issue to NASA’s Space Shuttle crew. On the same note, it will prove a lifesaver, and its fame will exceed all expectations!

A medical professional can be seen as a life-saver or simply as a human traveller on the journey of life. With the hectic schedule at work and daily exposure to a blur of new faces, lots of paperwork and enormous amounts of medical jargon needing to be translated to layman’s language for patients despite having little time, a doctor is also a juggler. In order to survive, the average doctor is required (or would wish) to carry many gadgets when practising medicine.1,2 With a variety of custom-made functions, the ease of use and portability of a multi-functional medical tool would be a boon to the harried medical health professional. This futuristic gadget should be designed to ‘have it all’: to provide the essentials needed in every clinical examination, consultation and night calls, as well as being stylish and on par with modern technology.

Ideally, this ideal gadget would be able to ease the burden of hunting for the appropriate equipment for clinical examinations, as well as providing a source of entertainment and information for owners. Besides that, an efficient tool that serves the owner well might increase morale and self-esteem, thus may directly improve mood, empathy and productivity. This is in stark contrast to the mood disturbances, apathy, and burnouts which are consequences of the sleep deprivation experienced by medical professionals, especially interns.3,4 Thus emerges an idea for a double-blinded randomised controlled trial to study and determine the effect of placing these ‘gifts’ in their Christmas stockings of interns and recording any reduction in sleep deprivation. Below is a list of components in the ideal multi-functional ideal suggested to make life in the hospital just a bit easier and comfortable as well as recommendations about essentials that should be carried around by medical professionals.4,5

1) Stretchable retractable tourniquet and tape measure:
   For tying the aggressive patient quickly and/or classically inducing or measuring venous stasis. Tourniquets and tape measures tend to be far and few in between. Now you can just use gloves as gloves and not as a substitute tourniquet.

2) Pen torch + blue filter:
   An essential tool required before charting PEARL, for finding the elusive Marcus-Gunn pupil, finding your dropped pen or the ‘invisible vein’ of a patient after the lights are turned off at night.

3) Programmable digital clock, alarm, pager and beeper:
   Leave your ward for a timed break, or a ‘Kit Kat’ but still feel secure that you will definitely be paged about every single aspect of your patients’ needs and wants. Or page your senior at any time to get advice and support or just to annoy them. And do not forget the code blue message that will result in the cardiac arrest team converging quickly at a designated location.

4) Key ring:
   Where else would you hang your car, office, postal box, house and chocolate safe keys?

5) Toothpick/floss:
   Proven by dentists to be better than no toothpick/dental floss in reaching spaces inaccessible to toothbrushes and thus reducing dental plaque build-up. Essential after gobbling dark-coloured sticky food in between clinics/ward rounds.

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Annals Academy of Medicine
6) 2GB flash disk and digital audio player with MP3 capability:

   Endless e-journals, presentations and music files can easily be organised in this ‘mini hard disk’ with a gigantic storage potential. With an in-built MP3 player, competition with Apple’s iPod will be stiff. Headphones provided for your private listening pleasure and to dance the stress away in your musical world. In short, fantasy transforming into reality for the techno-geek.

7) Multipurpose auriscope/ophthalmoscope:

   Made with economical materials yet able to achieve the best results, there is no condition in the face and neck that you will miss! (Proper training and technique as well as adequate knowledge is fundamental).

8) Slim fitting and retractable tendon hammer:

   A necessity for performing and mastering the neurological exam. You will never have to compromise results by testing reflexes with your stethoscope again!

9) Detachable sharp-pointed sensation pin, tongue depressor and digital thermometer tip (with refills):

   Complete and obtain an accurate clinical examination with these accessories which are usually hidden at far to reach corners in the ward. Bonus: free sterilisation of metal tip holders at the place of purchase!

10) Dictating machine and tape:

   Own your personal machine today and you won’t have to look for a dictator. Record and re-dictate at your leisure before submitting the tape to the secretary.

11) Foldable/removable chart of maps, telephone, and pager lists:

   Keep in touch with those close and important to you. The choice of numbers of who to include or exclude in your personal contacts collection is all yours.

12) Barley sugar case:

   Maintain blood glucose levels for those non-stop clinics, ward rounds, jobs and long lonely night shifts. Save yourself the embarrassment of falling face first into the surgeon’s operation table or fainting in front of your patient. You might even save a hypoglycaemic patient’s life.

13) Magnifying glass:

   You never know what you might miss without close scrutiny. Besides that, no doctor’s handwriting will be completely illegible again!

14) Can opener with small screwdriver:

   Part of the doctor’s survival kit for everyday situations, and dire circumstances of natural disasters or famine.

15) Bottle opener with large screwdriver:

   Part of the doctor’s survival kit for reasons above.

Conventional wisdom states that life without a drink can be quite dull and boring. So open up the cap and drink up.

16) Large blade:

   For all your slicing and dicing purposes and the emergency tracheotomy that you might encounter.

17) Scissors:

   Cut through life very straight and smooth.

18) Stress relief squeezable cushion:

   Take a deep breath and squeeze the dummy as hard as possible. Feel the difference.

19) Life time warranty:

   In concordance with the tradition of expert gadget producers and assurance of quality, all gadgets would last forever and thus be worth the cost.

20) A PDA and mobile receiving/emitting and GPS capability device:

   This would be handy but the gadget will be too bulky and run out of space, as seen in the Swiss Champ swiss knife!

With a touch of modern technology infused with the age-old sleek Swiss knife design this multi-purpose gadget of the future will be the stylish, yet essential item for the modern doctor. The ‘Flying Doctor Services’ which provide medical support in many rural areas around the globe would also appreciate a variation of the knife suited for their needs enabling them to virtually bring the ‘clinic to the outback’ and always stay in contact with the modern world. In summary, this gadget will ensure that you’re equipped for life’s adventures, no matter what they might be.

On a different note, if you ever get a chance to be a guest of the President of the USA in the future, guess what you will be given as a present – not just a Swiss army pocket knife. Just one more thing, try not to lose this special item or leave it at home.

REFERENCES

The Doctor's Multi-Instrument Tool of the Future?

- Light-torch
- Inlet to release/refill barley sugars
- Breath analyzer
- Removable toothpick
- Foldable, retractable tendon hammer
- Multi-purpose, extendable ophthalmoscope/auroscope with removable tip
- Squeezable deflatable destress toy
- Adapter plug
- Video/Audio in and out line
- USB port
- Memory stick
- Extra compartment for add-ons/ modifications
- Retractable ear phones/hands-free option
- Blunt/sharp pin
- Padding
- Thermometer tip
- Tongue depressor
- Digital alarm clock
- Can opener, scissors and bottle opener (not shown)
- Voice recording/dictating capability with MP3 player
- PDA writing/touch pad
- Blades
- Paging capability
- Blunt/sharp pin
- Blunt/sharp pin
- Stylet for typing/writing on screen