

Covid-19 Elbow Locking Band Prototype based on concept of 90 Degree movement locking of elbow for prevention of corona virus infection and Other infectious diseases



Original Concept: Rajesh Kumar Modi, Advisor, AKS University, Satna, India and Director Modi Webcom Pvt. Ltd. India

Prototype Implementation: Er. Anant Kumar Soni, Chairman, AKS University, Satna India

Corona virus aka Covid-19 pandemic has engrossed and baffled entire world including India and almost all Governments are crippling with massive number of infected patients. Information available as on date in public domain this virus spreads by sneezing, coughing by infected person by way droplets on face and touching of surface with virus load, If person touches his eyes, nose and mouth without sanitizing his/her hands, may get infection .It is common human nature to touch face by hands unknowingly number of times As of now there is no evidence of aerosol transmission of this virus.

Presently there is no medicine or vaccine available for treatment and prevention of Covid-19, hence right now prevention is the cure. We have to learn to live with corona virus as lockdown cannot be imposed for indefinite duration by any Government in the World. The original concept/idea we are suggesting is to create a very simple but effective device/equipment/arrangement prototype aka Covid-19 Elbow Locking Band to prevent person from getting infected by touching surface with virus load. When a person touches infected surface by hand and then touches his face(mouth/eyes/nose) virus enters into body. Covid-19 virus does not enter through healthy skin without wounds/cuts.

The Covid-19 Elbow locking Band is based on 90 degree locking of Elbow movement to prevent touching of face by hands will also be useful in other infectious diseases which spread by close contacts and touching of hands to face.

The concept/idea we are putting is simple but never thought and implemented before by any Country/Scientist/Doctor/Organization/Government/or any individual in world as per our information and knowledge.

What we suggest is concept of up to 90 degree elbow movement locking . Once we lock our elbow up to 90 degree, we cannot touch our mouth, eyes, nose and entire face. We can make this arrangement by simple elbow sleeve and copper or any metal 90 degree stop strap hinges. Except some tasks, we may perform almost all tasks with our elbow locked hands.

We may wear this Covid-19 Elbow Band Prototype for longer duration even day long. Only during some activities related to eating/brushing/combing hair we need to remove this Covid-19 Elbow Band Prototype. We have to sanitize our hands before and after wearing or removing this Covid-19 Elbow Band Prototype. This Covid-19 Elbow Band Prototype is very low cost solution and can be reused for months. Since it is not electronics/chip/battery based, cost is very low with no maintenance. If person is wearing mask he needs to wear his mask first before putting on this Covid-19 Elbow Band Prototype. This Covid-19 Elbow Band Prototype is washable and can be easily sanitized.

This Covid-19 Elbow Band Prototype will stop substantial secondary infection along with mask and other infection prevention measures, especially in following situation;

1. Quarantine and Isolation
2. Venturing out during lockdown for essential activities
3. Working in factory and offices
- 4 In schools colleges and Universities.
5. Any public place.

It may also save huge sanitization cost of public/private places and multiple time hand washing.

We are also incorporating in Covid-19 Elbow Locking Band Prototype design with some variation in movement locking elbow up to 90 degree, locking unlocking arrangement, along with protection mechanism to unlock elbow on high pressure to overcome any risky situation during elbow movement locking.

Please be aware that Covid-19 elbow locking band is not a medical device. Covid-19 elbow locking band is simple wearable band to change lifestyle.

Copyright and Intellectual Property Rights

All rights including concept and Covid-19 Elbow locking band prototype depicted in this document and related video including copyright and intellectual property rights are fully reserved with author and concept innovator Rajesh Kumar Modi and prototype implementation support Anant Kumar Soni. Manufacturing and marketing of Device/equipment/derivative based on this concept for defined use in this paper but not limited to by any organization/company/individual and Governments is prohibited without prior written permission from authors and intellectual property rights holder.

Disclaimer and Warning: This concept is not thoroughly tested for side effects of 90 degree elbow movement locking and task performed during 90 degree locked elbow. Readers/Viewers are advised self discretion to weigh advantage over risk associated if any before wearing this Covid-19 elbow locking band. We will not be responsible for any damage or loss due to wearing of Covid-19 elbow locking band based on 90 degree elbow movement locking concept, although as we know during fracture doctors put plaster on hand to fully freeze the elbow movements, Covid-19 elbow locking band is not freezing elbow movement it is just restricting elbow folding up to 90 degree.

You may view attached video for better understanding of concept and prototype.

https://www.youtube.com/watch?v=7owkRmCo_hQ

Copyright © Rajesh Kumar Modi, India 2020

Contact us:

Rajesh Kumar Modi
Mail: advisor@aksuniversity.ac.in
+91 9584037333

Anant Kumar Soni
Mail: anantsoni@aksuniversity.com
+91 9303310032

External Web Links showing importance of not to touch face to prevent getting Covid-19 infection

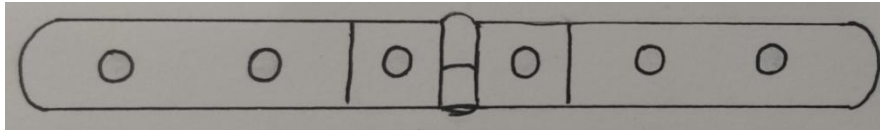
1. Stop Touching Your Face! It's a quirk of human nature that we touch our eyes, noses and mouths all day long. It's also a major way we pick up infections like coronavirus.

<https://www.nytimes.com/2020/03/02/well/live/coronavirus-spread-transmission-face-touching-hands.html>

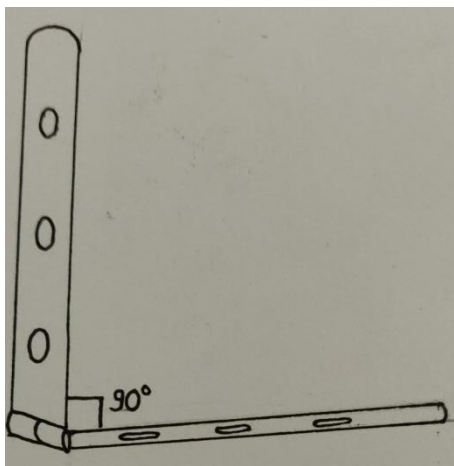
2. न्यूयॉर्क टाइम्स से / कोरोना से बचना है तो चेहरे को छूना बंद करें, दुनियाभर में 1.25 लाख मौतों के बाद भी लोग हर घंटे 23 बार फेस टच कर रहे

<https://www.bhaskar.com/international/news/coronavirus-spread-transmission-face-touching-hand-if-you-want-to-avoid-corona-then-stop-touching-the-face-even-after-125-lakh-deaths-worldwide-people-are-still-touching-the-face-23-times-every-hour-127174845.html>

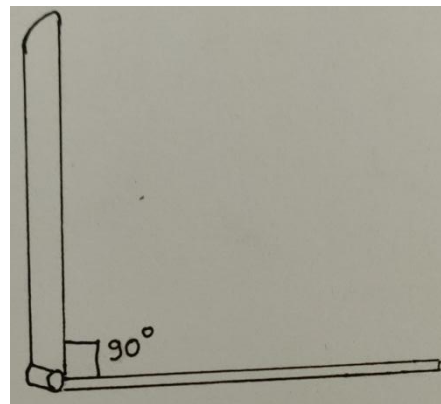
Covid-19 Elbow Band Prototype based on concept of 90 Degree movement locking of elbow for prevention of corona virus infection



(1)



(2)



(3)

(1) Hinge with welded Iron Strip of 4" length Both Side (2) & (3) 90 Degree position of Covid-19 Elbow Locking Band (Device) as shown in figure 1

Original Photographs of Covid-19 Elbow Locking Band Prototype



(A1) Hinge with welded Iron Strip of 4" length



(A2) 90 Degree position of Covid-19 Elbow Locking Band without sleeve



(A3) 90 Degree position of Covid-19 Elbow Locking Band inside sleeve



(A4)



(A5)

(A4 to A5) - Covid-19 Elbow Locking Band in Cloth Sleeve with wearing arrangement