OPEN ACCESS Freely available online

Journal of Biomedical Engineering and Medical Devices

Editorial

An Editorial Note on Pulse Watch

Sahil Roy*

Department of Cardiology, The University of Sydney, Camperdown, Australia

EDITORIAL

A pulse watch, also known as a pulsometer or pulsograph, is a personal monitoring and measurement device that can detect heart or pulse rate. Detection can take place in real time or be saved and reviewed afterwards. The pulse watch records electrocardiography (ECG or EKG) data as the user goes about their regular duties or engages in strenuous physical exercise. Without the use of wires or various sensors, the pulse watch works. It's especially handy in health and medical environments, where wires and sensors can be a pain. Individuals that are required to measure and monitor their biometric data in sports and exercise contexts frequently use the gadget. Physicians in the 17th century diagnosed ailments by analysing outward aspects such as breathing patterns, pulse, and signs of discomfort and fever.

Sir John Floyer, an English physician, created the first commercially marketed pulse watch in 1701. Floyer intended to create a watch that could accurately measure his patients' pulse rates. Floyer designed a watch that counts a user's heartbeat for sixty seconds, making it easier to monitor and measure a patient's heart rate. Samuel Watson, who was active in horology in the late seventeenth century, created Floyers' designs practically. Physicians began to make medical observations based on the number of heart beats per minute from this point forward (bpm). Many professionals have updated and reinvented the functions and mechanisms of the pulse watch throughout history. Medical schools and hospitals have continually used pulse detecting devices as a sort of medical technology to correctly time the pulse and breathing of patients.

The pulse watch has piqued the interest of numerous medical specialists since its initial availability in 1707. Scales were added to the apparatus measuring a patient's pulse in the early 1920s by Swiss manufacturers to improve its speed, precision, and reliability. Smartwatch wearable gadgets are gaining popularity due to their capacity to conduct a variety of biometric and technological functions in addition to measuring pulse. Despite this, conventional pulse watches are still produced by manufacturers such as Longines, Blancpain, Montblanc, and Vacheron Constantin. Users of the device that measures their heart rate at a steady and continuous level, particularly when in excessive motion, have expressed concerns. Many studies have looked at how accurate these wearable devices are in measuring and monitoring heart rate, and they've discovered that they give users accurate results.

In one experiment, 50 volunteers between the ages of 18 and 32 walked and ran on a treadmill for 30 minutes. At the end of each minute of the trial, each participant manually assessed their heart rate. According to the study's analytical criteria, the pulse watch showed some inaccuracies but still had a 95 percent accuracy level. In a separate study, 25 people engaged in various forms of physical activity, ranging from standing to running. According to the findings, the pulse watch device accurately recognised users' heart rates while standing, walking, and jogging, however there were occasional failures when the body was in considerable motion during athletic activities. Wearable heart rate monitors have piqued people' interest for quite some time. In addition to the pulse watch, which measures heart rate using wrist pulse detection. Similar technologies are also used in devices that monitor heart rate from the ear, forearm, and chest via a chest strap.

Correspondence to: Sahil Roy, Department of Cardiology, The University of Sydney, Camperdown, Australia; E-mail: sahil_roy@gmail.com

Received: November 11, 2021, **Accepted:** November 16, 2021, **Published:** November 21, 2021

Citation: Roy S (2021) An Editorial Note on Pulse Watch. J Biomed Eng & Med Dev. 6: 195.