

## Technomedicine 5.0: The art of metaverse in healthcare

Dito Anurogo\*<sup>1,2</sup>

<sup>1</sup>Faculty of Medicine and Health Sciences, Universitas Muhammadiyah Makassar, Makassar, Indonesia.

<sup>2</sup>International PhD Program for Cell Therapy and Regeneration Medicine, College of Medicine, Taipei Medical University, Taipei, Taiwan.

### EDITORIAL

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\*Corresponding author:  
d151109004@tmu.edu.tw

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Most of the computer industries discern that the metaverse is the next generation of the internet, a single, shared, immersive, persistent, three-dimensional (3D) virtual arena where humans can experience life that is impossible in the real world.<sup>1</sup> Metaverse is the successor to the internet. This technology's 3D environment facilitates engagement and cooperation by associating users' actual presence. Metaverse standardization is a key. Metaverses can interact via shared technologies and characteristics. Metaverse may enhance healthcare.<sup>2</sup>

Augmented reality (AR), virtual reality (VR), lifelogging and mirror world make up the metaverse. AR and VR technologies enable multimodal interaction with people, digital tools and virtual surroundings. The AR turn real-time images into a real life by using smartphones or glasses. The metaverse adds information to reality, such as: 3D medical animations.<sup>3</sup> Then the lifelogging enhances the inner world. Smart devices record daily life online, unlike augmented reality, i.e.: Instagram, Facebook, Twitter, and another health monitors or devices.<sup>4</sup> Furthermore, the mirror world simulates reality; the actual form, information and framework are recreated in a digital environment, which can then be accessed via the internet or a mobile application. "Digital laboratories" on Google Maps or Earth and "virtual educational spaces" on platforms like Google Meet, Microsoft Teams, Webex and Zoom are two examples of the virtual platforms.<sup>5</sup>

VR simulates the inner world with avatars and instant communication and personalize the avatar's cultural, physical, and social traits. Avatars communicate and achieve goals. Virtual hospitals, multiplayer games and consultation rooms are examples.<sup>6</sup> These ideas transcend digital technology by connecting the digital and physical and people and technology in new ways. The mobile device camera digitizes the physical objects for augmented reality. Virtual reality will bring you to the small town where your purified water will be delivered.<sup>7</sup> In terms of healthcare administration, the metaverse has the potential to expedite registration with doctors, hospital selection and prescription processing, which can be time-consuming. Through telemedicine, the metaverse is effective at identifying problems and providing prescriptions. Provider-patient communication must be managed for telemedicine services.<sup>8</sup>

The metaverse is able to enhance communication and engagement through a deeper understanding of emotions. It generates a setting that resembles the real world, making it easier to perceive others and do business.<sup>9</sup> Problem analysis based on experience or patient words is sometimes inaccurate, so it can monitor its patients' issues and behaviors. Treatment for psychiatry and for other diseases and disorders supported by the metaverse may reduce time and eliminate spatial and temporal issues.<sup>10</sup>

The drawbacks of the metaverse are that medical information may be given and handled with respect to privacy and informed consent. There is a need for regulations and policies to address various issues, such as medication replacement therapy.<sup>11</sup> As a simulation of the real world, the metaverse is useful for studying human behavior. Moreover, the emergence of the metaverse concept may steer the healthcare business in new directions.<sup>12</sup>

The metaverse is now a digitally supported ternary civilization. The ternary community includes machines, people and physical objects.<sup>13</sup> A great Roman emperor and philosopher Marcus Aurelius said "He, who lives in harmony with himself, lives in harmony with the universe." Therefore, you should begin the process of developing yourself and your reality today, and you should support others in doing the same. This experience will provide you with not only a reality to live in but also a purpose to live for. It is the art of metaverse.

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