

BÖLÜM 14

SAĞLIK 4.0 UYGULAMALARININ SAĞLIK KURUMLARININ VERİMLİLİĞİ ÜZERİNE ETKİLERİ

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GİRİŞ

Sağlık sektörü havacılık, savunma, uzay araştırmaları ve hukuk gibi alanlarda olduğu gibi kararlarda doğruluk büyük önem taşıdığı sektörlerden biridir. Çünkü bu alandaki her karar ve eylem, insan yaşamını ve sağlığını doğrudan etkileyebilmektedir. Kararların doğruluğunda kesinliği arttırmak ve sağlık hizmeti sunumunun kalitesini yükseltmek için sağlık kuruluşlarının ve çalışanlarının teknolojiye en son gelişmeleri yakından takip etmeleri ve bu teknolojilere uyum sağlamaları gerekmektedir. Nesnelerin interneti, yapay zekâ, bulut bilişim, büyük veri analitiği, blok zincir, robotik ve katmanlı imalat gibi yeni teknolojilerin yükselişi, dünya çapında sağlık hizmetlerinin gelişimini ve akıllı sağlık sistemlerinin oluşmasını kolaylaştırmaktadır. Akıllı sağlık sistemleri söz konusu bu teknolojilerin kullanıldığı ve optimum bir yönetim sisteminin oluşturulduğu bulut verilerini içeren dijital bir tıbbi sistemdir.

Geleneksel sağlık hizmetleri denildiğinde ilk olarak fiziksel randevular, el ile yapılan muayeneler ve tamamen insan katılımına bağlı tedavi süreçleri akla gelmektedir. Ancak COVID-19 gibi salgınlar sağlık çalışanları ile hastaların yüz yüze temasının sınırlandırılması gibi yeni ihtiyaçları ortaya çıkarmıştır. Sağlık 4.0 bu ihtiyaçların karşılanmasına önemli katkılar sağlama potansiyeline sahip ve sağlık sektörünü dönüştüren, teknoloji odaklı bir konsepttir.

Sağlık 4.0 ile oluşturulan dijital ve akıllı sağlık alt yapısı, sistemlerin entegrasyonunu kolaylaştırmakta, daha büyük verilerin toplanmasını, daha hızlı ve daha hassas analizlerin yapılmasını sağlamaktadır. Dijital sağlık hizmetleri hastalara birçok avantaj sağladığı gibi sağlık personelinin de daha kaliteli sağlık hizmeti sağlama konusunda desteklemekte, daha doğru ve hızlı tanı koymalarına ve tedavi yöntemlerini özelleştirmelerine katkı sağlamaktadır. Endüstri 4.0 kavramından türetilen Sağlık 4.0 kliniklerin, hastanelerin ve diğer sağlık kuruluşlarının faali-

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ması, paylaşılması ve iletilmesine imkân sağlayarak doktorlar, sağlık birimleri ve diğer sağlık kurumları arasında entegrasyonun sağlanmasına ve iş akışlarının düzenlenmesine katkı sağlamaktadır. Bulut hizmetleri, güvenli ve şifreli sunucular sayesinde gizli dosyaların güvende tutulmasına yardımcı olabilir. Ayrıca bulut hizmetlerinin depolama kapasitesi ihtiyaca göre değiştirilebilmekte ve böylelikle maliyet tasarrufu da sağlanabilmektedir.

Sonuç olarak Sağlık 4.0 büyük miktarda veriye erişimin sağlanabildiği, insan müdahalesi olmadan bazı kararların verilebildiği ve bazı işlemlerin otomatik olarak yapılabildiği bir sistemi ifade etmektedir. Sağlık 4.0 ile amaçlanan hastalara daha iyi, daha katma değerli ve daha uygun maliyetli sağlık hizmetleri sunarken aynı zamanda sağlık sektörünün etkinliğini ve verimliliğini artırmaktır. Çalışma kapsamında detaylı olarak incelenen ve sağlık sektöründe kullanılmaya başlanan Endüstri 4.0 teknolojilerinin ülkeler için stratejik bir sektör haline gelen sağlık sektöründe bir taraftan sağlık hizmeti deneyimini iyileştirirken diğer taraftan da sağlık hizmetlerinin kalitesini, esnekliğini, üretkenliğini, maliyet etkinliğini ve güvenilirliğini arttırma potansiyele sahip olduğu görülmektedir. Bu avantajlardan yararlanabilmek için kamu otoritesi tarafından Sağlık 4.0'a geçiş ve adaptasyon sürecinin teşvik edilmesi, sektör yöneticilerinin ve tüm paydaşların konuya odaklanmalarının sağlanması, Sağlık 4.0'ın sağlık kurumlarının hizmet kalitesi, verimliliği ve maliyetleri üzerindeki olumlu etkilerinin açık bir şekilde ortaya konulması, adaptasyon sürecinin kısılması için sektör çalışanlarının eğitimlerinin gerekli nitelikler doğrultusunda olmasının sağlanması, dijital dönüşüm sürecinin mali olarak desteklenmesi ve bir plan dahilinde aşamalı olarak gerçekleştirilmesi büyük önem taşımaktadır.

Söz konusu teknolojiler sağlık sektöründe önemli kazanımlar sağlanmasına rağmen büyük miktarda yatırım yapılma zorunluluğu ve buna paralel finansman yetersizlikleri, nitelikli personel eksikliği ve hastaların bu teknolojilere adaptasyon sorunları en önemli engeller olarak ifade edilebilir. Bundan sonraki çalışmalarda sağlıkta büyük bir dönüşümün yaşanmasına sebep olan bu teknolojilerin benimsenme ve kullanım oranları araştırılabilir, kullanımına engel olan faktörler tespit edilmeye çalışılabilir ve maliyetler üzerine etkileri incelenebilir.

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