What can We Provide for Future Generations? Digitalization, Income, and Health

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Abstract

This study comprehensively examines the relationship between income and technology and its impact on health outcomes. The authors demonstrate how technology spending enhances well-being and contributes to GDP per capita by increasing labor force participation and production levels. Conversely, income growth leads to increased public health spending in affluent countries. The study begins by delving into demographic insights, utilizing statistical methods to explore the relationship between income levels and technology's impact on health. Subsequently, the study analyzes the relationships between income, healthcare, technology, and health status. Data gathered from a sample of 500 individuals in the UAE between August 2022 and February 2023 highlights the substantial impact of digitalization on public health, particularly in urban areas with middle-income earners. The questionnaire was used to collect data from respondents and was analyzed through SPSS. The research findings also reveal that income inequality can influence the effect of digitalization on health. This study contributes to the advancement of digital health research, offering valuable insights into the role of technology in promoting sustainability in health and essential services.

Keywords: *Digitalization, health, income, social life, welfare.*

Introduction

In September 2015, the United Nations introduced 17 sustainable development goals, serving as crucial navigational tools for the progress of developing countries. However, accomplishing all these objectives simultaneously can only happen with unity and coherence among them (Boluk et al., 2019; Mhlanga, 2021; Moallemi et al., 2020). The pursuit of sustainable development is a shared concern for all societies, whether capitalist or developing. Improving the social well-being of states depends on various economic, social, political, and other factors. Consequently, countries strive to achieve both basic development and sustainable approaches in all areas. Today, achieving sustainable development requires collective efforts from governments, private institutions, and

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individuals. The concept of common social responsibility extends beyond an individual element of development (Molomo, 2023; Saratna, 2023). Therefore, it is imperative to strengthen cooperation between countries by activating the general principles of globalization and Free Trade Agreements.

Public health stands as a cornerstone for societies and organizations, given that human health is a primary factor in achieving social well-being and the development of societies, as illness can lead to relapse and underdevelopment (Modna et al., 2023; Wang & Xu, 2023). The World Health Organization (WHO) underscores the significance of individuals' health as a crucial determinant of sustainable development (WHO, 2021). Research shows that social policies have a more substantial impact on improving individuals' health status than democracy alone. Distributive justice mandates the inclusion of public health as a vital element in sustainable development, with human organizations recognizing it as a fundamental human right.

Studies have demonstrated that social policies play a more influential role in enhancing individuals' health status, emphasizing the importance of democracy and distributive justice. Through the 2030 Agenda for Sustainable Development, especially SDG 3, the emphasis is on promoting public health and overall development (Mansour, 2020; Tosun & Leininger, 2017). Modern government policies are increasingly centered on the digitization of healthcare to address disparities in healthcare and enhance digital access (Thorlu-Bangura et al., 2023). Today, technological progress has made the digitization of healthcare a necessary and irreplaceable need. Electronic medical records (EMRs), encompassing patient records, appointments, electronic consultations, wearable devices, and sports devices, aim to facilitate services to customers.

(WHO) has underscored the importance of health digitization, encouraging countries to transition toward digital health services (Global Strategy on Digital Health 2020-2025, 2021). The UAE is actively implementing sustainable social policies to leverage global technological progress and build a robust digital economy. Being one of the leading countries in technology and artificial intelligence investments, these strategies are pursued by creating foreign investment opportunities without compromising social security. In April 2022, the UAE launched a digital economy strategy with the goal of doubling GDP from 9.7 to 19.4 over the next ten years (WHO, 2021).

The UAE stands out as a major proponent of digitalization in healthcare, having embarked on its technological transformation in the field earlier than many other countries. The prevailing focus in the UAE is on enhancing digital services, with a continuous commitment to ensuring that health

institutions are well-equipped to provide the best services to customers. The UAE Ministry of Health (MoHAP) has played a pivotal role by establishing a unified medical record system in the country. This system facilitates collaboration between public and private departments in managing patients' medical records, ultimately enhancing the accuracy of diagnosis and treatment. The state has introduced various initiatives to promote digital health. In Dubai, the Riayati Health Authority, a unified national system for medical records, has launched an innovative program in collaboration with the Ministry of Health and Prevention. The aim of this initiative is a comprehensive transformation of the healthcare system into a digital framework (Benito, 2022).

The study presented aims to investigate the correlation between digitization and public health, with specific exploration of the intermediate variable of income rate. The focus is on the (UAE) due to its strategic location in the sub-Middle East. The research delves into the impact of digitization on the public health of both citizens and residents in the UAE, assessing its prevalence within the study community through the influence of the intermediate variable. Ultimately, the findings may provide essential insights for health policymakers in the Middle East and other developing nations.

Literature review

The role of digital on individuals health

Since the early nineties, particularly in 1992, as countries joined the Free Trade Organization and endorsed the Uruguay agreement, there has been a concerted effort to enhance living and economic conditions by leveraging technology investment across various sectors. The advent of globalization and its tools has opened up new and previously unexplored avenues for investment and employment opportunities (Guzel et al., 2021). The application of technology and artificial intelligence has made therapeutic services more accessible to individuals (McMullan, 2006). However, these digital tools are not universally available, particularly in less developed countries. The existence of poverty, low standards of living, and limited income in these regions undoubtedly hampers the process of sustainable development and can hinder access to crucial services such as quality healthcare (Kruk et al., 2018).

Digitization has emerged as a transformative force impacting various aspects of life, and health systems are no exception to these developments (Azzopardi-Muscat et al., 2019). Odone et al. (2019) found a correlation between public health and digitization, emphasizing that the latter offers

numerous benefits for individuals. Rather than merely seeking treatment, digitization empowers individuals to proactively prevent diseases and easily locate care centers at a lower cost. Kayserili and Colkesen (2023) assessed the extent of healthcare digitization and the use of telemedicine in healthcare settings, drawing on data from in-depth face-to-face interviews with 20 administrative officials leading digitization efforts in health institutions in Turkey. The results highlighted several advantages of digitalization in healthcare, including cost reduction for patients, improved patient experiences, decreased medical errors, data integrity, digital archiving, and increased preference for drug delivery services. Agliacozzo at el., (2021) investigated the level of health digitalization services in Sweden and the United States, revealing that institutions are rapidly adopting modern technologies. However, challenges exist for doctors in utilizing data during daily patient examinations, leading to deficiencies in updating electronic records.

H1. There is a statistically significant relationship between digitization and public health.

The role of Income on health

Richard Wilkinson, a prominent British scientist researcher has extensively explored the relationship between income distribution and healthcare. His groundbreaking study, published in the British Medical Journal in 1992, was a significant exploration of this relationship. Through an analysis of nine industrial countries, Wilkinson found a robust correlation between an individual's average age and the quality of income (Subramanian et al., 2003). Disparities in social health align closely with differences in per capita income rates, with health generally being better for higher-income individuals and lower for those with lower incomes (Karlsson et al., 2010).

Most middle-income individuals typically have access to health services. The standard of living is also associated with mortality rates and various psychological and physical issues (Koehler et al., 2021; Patel, 2007).The study emphasized the crucial role of the time factor in influencing health outcomes and suggested the necessity of considering temporal changes when adjusting income scales in countries. This approach could lead to a fundamental shift in income inequality over time. For instance, in the USA, there was a notable sudden increase in the average income of individuals over the last 20 years (Elgar, 2010). Specifically, the average annual per capita income in the United States experienced a 10% increase from 1970 to 1998.The average salary of the top 100 CEOs in America saw an increase of 1.3 million, equivalent to about 39 times the salary of the

average individual. Addressing such income disparities has become a focus of modern social policies (Brian et al., 2017; Subramanian & Kawachi, 2004).

In their study, Inam and Murat (2021) sought to understand the impact of income differences on health through a quantitative approach, analyzing information from 29 countries. The results revealed a strong correlation between income inequality and individuals' health. Similarly, Turner et al. (2016) examined the relationship between income disparities and health by analyzing US data from 2000 to 2014. The results indicated no correlation between average income and overall health. Instead, the findings revealed that individuals with limited income experienced a shortened lifespan due to difficulties in paying bills and affording medicine. Researchers uncovered the impact of income on human health using a quantitative approach, analyzing data from 29 countries (Inam & Murat, 2021; Nolan et al., 2017; Subramanian & Kawachi, 2004). The findings demonstrated a robust relationship between income and health. Meanwhile, Turner et al. (2016) explored the relationship between income disparities and health within the context of US politics from 2000 to 2014. The results of their study showed no correlation between average income and overall health among individuals. Furthermore, the findings suggested that individuals with limited income faced challenges in affording essential expenses, impacting their average lifespan due to difficulties in paying bills and purchasing medication.

H.2. There is a statistically significant relationship between digitization and public health due to income inequality.

Digitalization and income

The Department of Social Affairs participated in these studies, with some research indicating that positive factors contribute to improving individuals' lives, reducing poverty levels, and supporting sustainable development (Faizah et al., 2021). A study by Haq et al. (2023) investigated the impact of digitization on income using a panel of twenty data groups for the period 2002-2018. The findings suggested that digitization has a mitigating effect on income inequality. In contrast, Jorge and Fernando (2021) examined the impact of digitization on income using data from 45 countries between 2000 and 2017, revealing that digitization is a significant contributor to inequality. Simultaneously, other research on the impact of digitization on income has found that it can lead to increased inequality in accessing good jobs, reduced income, and a lack of innovation and creativity due to high rents and market dynamics (Ali et al., 2019; Zi et al., 2022).

Conceptual Framework

The conclusion drawn from the literature review and the proposed hypotheses is depicted in Figure 1, illustrating the conceptual framework of this study.
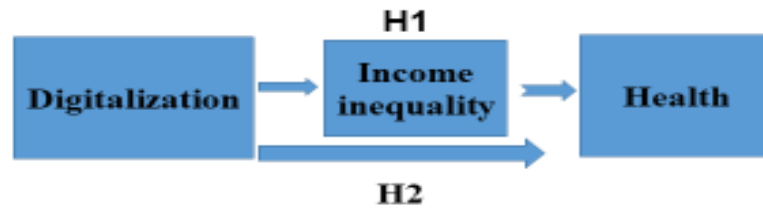

Figure 1: *Research Conceptual Framework*

Main Variables:

Digitalization (Independent Variable):

Definition: The degree to which digital technologies are adopted and integrated into different aspects of societal life.

Income (Mediating Variable):

Definition: The distribution of income in society, encompassing both overall wealth and income inequality.

Public Health (Dependent Variable):

Definition: The holistic health and well-being of the population.

Relationships:

H1: There is a statistically significant relationship between digitization and public health.

Potential Explanation: Higher levels of digitization might result in enhanced accessibility to health information, telemedicine services, and health-tracking technologies, thereby positively influencing public health.

H2: There is a statistically significant relationship between digitization and public health due to income inequality.

Potential Explanation: Income inequality might influence access to both digital technologies and healthcare services, acting as a mediating factor in the relationship between digitalization and public health.

Contextual Factors:

Cultural Context:

Definition: The collection of cultural values and norms that may influence the acceptance and integration of digital technologies and health-seeking behaviors within a society.

Government Policies:

Definition: The impact of government policies on the structure of income distribution, accessibility to healthcare, and the implementation of digital initiatives.

Method

In this section, we will delineate the research methodology, the target population, the research instrument, the data collection and analysis techniques employed, and the methodology for hypothesis testing.

Design

Given that the study involves gathering respondents' opinions on digitization and healthcare from respondents, a social survey was employed using a sample to ensure a comprehensive representation of the study participants (Fulvio & Vegard, 2018). To explore opinions on digitization and healthcare among residents of Abu Dhabi City. Acknowledging the inherent diversity within this urban context, a cluster sampling method is utilized to ensure a representative and nuanced comprehension of the population's perspectives. In this context, clusters are defined by distinct Facebook groups, which function as virtual communities within the larger city.

Sample

Acknowledging the extensive size of our study community, we adopted a targeted approach to engage participants through Facebook groups. The selection of these groups was based on specific criteria to ensure relevance to our research objectives. We identified 12 social interaction groups that met our predefined criteria, considering factors such as the group's thematic alignment with our study, active engagement of members, and diversity within the group. Cluster sampling was adopted due to the practical constraints of obtaining a comprehensive list of all residents and the convenience of accessing participants through established online communities. In this sampling approach, each Facebook group represents a cluster, providing a more efficient and feasible means of reaching a diverse cross-section of the population. Table 1 outlines the characteristics of the study community, depicting 267 individuals working in the government sector at 53.4%, 233

individuals working in the private sector at 46.6%, and 120 individuals aged between (31-40), constituting 24%. The majority of the study community members receive a monthly allowance ranging from (20-35) thousand dirhams per month, accounting for 63.3%.

Table 1

Breakdown of the individuals based on Age and Income

Variable		Frequency	Percent
Age	20-30	113	22.6
	31-40	120	24.0
	41-50	100	20.0
	50-60	104	20.8
	Above 60	63	12.6
	Total	500	100.0
Monthly Income/	Less 20	60	12.0
thousands UAD	20-35	316	63.2
	36-50	37	07.4
	51-75	33	06.6
	76-95	28	05.6
	96-116	21	04.2
	Above 116	05	01.0
	Total	500	100.0
Work	public sector	267	53.4
	private sector	233	46.6
	Total	500	100.0

Instrument

The researchers developed a two-part self-questionnaire using Google Drive. The first section focuses on gathering demographic information from the respondents, while the second comprises 30 items rated on a 5-point Likert scale. Items 1-15 aim to identify the role of per capita income in health, while items 16-30 shift the focus to exploring the relationship between digitization and income. Analyzing responses from the same group of participants, we aimed to clarify the potential impact of digitization on income. The comprehensive dataset, consisting of 500 responses collected from Facebook groups in Abu Dhabi, allowed for a deeper exploration of the intricate relationship between digitization and income. We anticipate that our findings will contribute valuable insights into understanding the dynamics between these two variables, fostering

knowledge and research in the field. To validate the study tool, we subjected the questionnaire to a group of specialists in the social sciences and humanities college in University of Jordan, including an expert in measurement and evaluation and a proofreading expert. Adjustments were made based on their observations before distributing the tool to the respondents. To ensure the tool's reliability, we examined the Cronbach alpha correlation coefficient for each main axis individually and for the tool as a whole, resulting in a coefficient of 0.87. This coefficient was deemed acceptable for obtaining preliminary data from the sample members, confirming the validity of the study, as shown in Table 2.

Table 2

Cronbach's Alpha for Questionnaire Reliability

Domain	No. of Items	Cronbach's alpha
Digitalization	6	0.91
Health	7	0.86
Income	7	0.88
Total	20	0.87

Data collection

We specifically targeted Facebook groups comprising individuals from various regions in the UAE. Prior to distributing the questionnaire, we obtained explicit consent from the participants, providing a clear explanation of the study's purpose and subject. We assured them that their responses would be solely used for scientific research purposes. In total, we received 513 responses. After a thorough examination, we excluded 13 incomplete responses, resulting in the analysis of 500 valid answers at a confidence level of 0.05.

Data analysis

To characterize the study community, we employed frequencies and percentages. To assess the reliability of the questionnaire, we utilized Cronbach's alpha. Mean values and standard deviations were employed to gauge the participants' level of technology usage, their engagement with healthcare services, and the extent of spending on technology. To address the hypotheses probing the relationship between independent and dependent variables, we utilized multiple linear regression. Additionally, Pearson correlation coefficients and t-tests were conducted.

Finding

Upon successful culmination of our primary data collection phase, we meticulously undertook the crucial steps of tabulation, classification, and coding. This intricate process laid the foundation for a systematic and comprehensive analysis, leveraging the advanced capabilities of the Social Sciences Package (SPSS) program. By employing these rigorous methodologies, we have not only organized the data with precision but also positioned ourselves to extract meaningful insights and patterns, thereby enhancing the depth and reliability of our research findings.

Descriptive Results

The results obtained from our meticulous analysis revealed a deviation from the norm in the data distribution, signifying a departure from the anticipated normal distribution, and it is noteworthy that existing studies have suggested that the stringent requirements for normal distribution may be relaxed for samples larger than 30 (Pett, 2015). In our study, the sample size comprised 200 individuals.

The questionnaire was analyzed using SPSS, and the study yielded results pertaining to participants' responses regarding their use of digital technology, as illustrated in Table 3.

Table 3

Respondents ' answers about their use of digital technology

Item	Mean	Standard deviation
I always use technological applications in booking appointments	4.3	0.95
I always use technological applications to consult a doctor	4.4	0.93
I often use technological applications in obtaining prescriptions	2.1	1.14
I think the technological application of healthcare institutions serves me very well	3.2	1.2
Technological application of healthcare institutions is useless	1.4	0.87
I am experiencing technical problems when ordering healthcare services	3.1	0.92
Mean	83.5	

The results presented in Table 3 show the extent of the study community's utilization of digital applications for health-related purposes. The second question, "Always use technological applications to consult a doctor," received the highest response, with an arithmetic mean of 4.4 and a standard deviation of 0.93. Following closely was the first question, "Always I use technological applications in booking appointments," with an arithmetic mean of 4.3 and a

standard deviation of 0.95. The question "I think the technological application of healthcare institutions serves me very well" secured the third position with an arithmetic mean of 3.2 and a standard deviation of 1.2. Subsequently, the sixth question, "I am experiencing technical problems when ordering healthcare services," received an arithmetic mean of 3.1 and a standard deviation of 0.92. Lastly, in the fifth question, "Technological application of healthcare institutions is useless," the response exhibited the lowest arithmetic mean of 1.4 and a standard deviation of 0.87.

Table 4

Responses to the Level of Health Services

Item	Mean	Standard deviation
Health insurance covers all medical and therapeutic consultations	1.1	1.23
Health insurance does not cover some treatments	3,7	1.06
The health insurance company is late in approving the prescription	3.8	0.83
Sometimes the health insurance company does not dispense the entire medication	2.8	0.86
Sometimes the insurance company does not cover lab medical tests	4.3	0.94
Mean	63.2	

The results presented in Table 4 depict the responses of the study sample concerning their interactions with health insurance services. The fifth question, "Sometimes the insurance company does not cover lab medical tests," garnered the highest response, achieving an arithmetic mean of 4.3 and a standard deviation of 0.94. Following closely, the third question, "The health insurance company is late in approving the prescription," received an arithmetic mean of 3.8 and a standard deviation of 0.83. Additionally, the second question, "Health insurance does not cover some treatments," occupied the third-fourth position, recording an arithmetic mean of 3.7 and a standard deviation of 1.06. The fourth question, "Sometimes the health insurance company does not dispense the entire medication," obtained an arithmetic mean of 2.8 and a standard deviation of 0.87. Lastly, the first question, "Health insurance covers all medical and therapeutic consultations," exhibited the lowest arithmetic mean of 1.1 and a standard deviation of 1.23.

Table 5

Study Sample Responses Regarding the Duration of Investing Income in Digitization

Item	Mean	Standard deviation
I can buy modern electronic devices	4.6	0.86
I can provide modern devices for children	4.2	0.88
Always replace your mobile /mobile device with a modern one	3.2	1.03
I always have the latest appliances in my house	4.0	1.15
I provide the latest devices and internet in my vehicle	2.1	1.08
Mean	87.1	

The findings outlined in Table 5 present the responses of the study sample concerning their allocation of income toward the advancement of technological services. The initial question, "I can purchase modern electronic devices," received the most substantial response, indicating an arithmetic mean of 4.6 and a standard deviation of 0.86. Following closely was the second question, "I can provide modern devices for children," with an arithmetic mean of 4.2 and a standard deviation of 0.88.

Furthermore, the fourth question, "I always have the latest appliances in my house," secured the third position with an arithmetic mean of 4.0 and a standard deviation of 1.15. The third question, "I always upgrade my mobile/mobile device to a modern one," obtained an arithmetic mean of 3.2 and a standard deviation of 1.03. Lastly, in the fifth question, the response demonstrated the lowest arithmetic mean of 2.1 and a standard deviation of 1.08.

Before testing hypotheses using a multivariate test, it is imperative to confirm that the data adheres to normal distribution and linearity. It is noteworthy that testing was pursued despite the absence of a normal distribution, given that samples exceeding 30 do not necessitate a strict adherence to normality, as indicated by Serdar et al. (2021).

Table 6

Correlation Matrix of Independent Variables and Dependent Variable Top of Form

Correlations		digitization	Health	income
Pearson Correlation	Digitization	0.123	.006	.004
	Health	.0157	0.322	.328
	Income	.004	.328	0.412
Sig. (1-tailed)	Digitization	.	.006	.041c
	Health	.341	.	.047
	Income	.036		.
N	Digitization	500	500	500
	Health	500	500	500
	Income	500		500
		500		500

Table 6 shows a robust correlation between the digitized independent variables, income, and the dependent variable, public health. This suggests that an increase in the average income of individuals in society is associated with improved digital access, thereby positively impacting the overall public health of individuals. The significance (Sig) values for all variables support this relationship, with each being less than 0.05.

Hypothesis1 Testing

H1: There is a statistically significant relationship between digitization and public health.

Before starting the multiple regression test for the study variables, we would like to emphasize that the data did not follow a normal distribution and this can be explained by the sample size of more than 50 individuals (Hamas, 2022).

Table 7

Presentation of the Multiple Correlation Coefficient and Health Coefficient

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.636a	.517	.512	6.757341
2	.721b	.623	.623	6.693613

a. Predictors: (Constant), Health

b. Predictors: (Constant), Health

Table 8

ANOVA Analysis of Variance Among All Variables

						ANOVAa
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.172	2	.086	.334	.541[b]
	Residual	86.00	212	.325		
	Total	86.00	213			

a. Dependent Variable: Health

b. Predictors: (Constant), Digitalization, Income

Table 9

Results of Multiple Linear Regression Analysis Among the Variables

Independent variables	*B*	*B*	*The percentage of the explained variance in the dependent variable*	*%of the explained variance in the dependent variable*	*T*	*Sig.*
Digitalization	*0.672*	*.0821*	*.0612*	*18.14*	*18.321*	*0.000*
Income	*.0.643*	*.0826*	*.0623*	*16.26*	*.5564*	*0.000*

Tables 7, 8, and 9 show that the coefficient of multiple correlation between the two variables is 0.721. This indicates a close relationship between digitization and income concerning their impact on the level of health. The coefficient represents the variability in promoting the level of health attributed to both independent and intermediate variables.

Hypothesis 2 Result

H2. There is a statistically significant relationship between digitization and public health due to income inequality.

Table 10

Results of T-Test for the Differences Between the Mean Scores of the Dependent Variable According to the Income Variable

Sig.	T	Income		Dependent variable
0.0231	0.432	74.5	75.2	Health

To investigate the implications of the second hypothesis, which suggests significant differences in the average scores of Emirati health based on income, a t-test was utilized. Table 10 shows that the calculated t-value is 0.0231, with a corresponding significance level (sig) greater than 0.05. This indicates that as an individual's income level increases in the UAE, it is associated with improved access to health services and an enhancement in their overall health. Moreover, this result strongly supports the validity of the second hypothesis.

Discussion

Digital Impact on Health Services

Our findings regarding the impact of digitization on individual health align with the broader discourse on the transformative effects of technology in healthcare. As highlighted by Odone et al. (2019), our study supports the positive relationship between digitization and health outcomes, emphasizing the accessibility and cost-effectiveness of care centers. Additionally, our results are in line with the findings of Kayserili and Colkesen (2023), who also underscore the benefits of digitalization, including reduced costs for patients and improved healthcare services. Nevertheless, our study highlights challenges encountered by non-participants with high insurance coverage, echoing concerns raised by Øvretveit (2019) regarding errors in electronic health records. Delays in insurance approval processes for prescription dispensing and incomplete prescriptions, as highlighted in our results, further underscore the need for refining digital systems to enhance efficiency and reduce errors. These challenges align with existing literature, emphasizing the importance of addressing pitfalls in the implementation of digital healthcare.

Income's Role in Health and Digital Access

The findings from our exploration of the relationship between income and health are consistent with studies by Koehler et al. (2021) and Patel (2007), highlighting the association between per capita income and access to high-quality health services. Individuals in our study with above-average incomes not only exhibited improved access to healthcare services but also demonstrated the capacity to stay abreast of recent advancements in digitization, acquiring new devices for themselves and their families. Furthermore, our study aligns with research by Inam and Murat (2021), Nolan et al. (2017), and Subramanian and Kawachi (2004), which quantitatively established a robust link between income and health across diverse countries. These findings

emphasize the multifaceted impact of income on health, underscoring the importance of policies that address income disparities to enhance overall well-being.

Synthesis and Implications

The congruence between our study and existing literature underscores the coherence in comprehending the impact of digitization and income on health. To address the limitations identified by the reviewer, future research could delve more profoundly into specific facets of challenges related to digitization and income disparities, offering a more nuanced understanding of the intricacies involved.

Implications of the Study

Our study holds significant implications for healthcare policy and practice:

Digital Health Optimization

Our findings emphasize the positive impact of digitization on health outcomes, emphasizing accessibility and cost-effectiveness. Policymakers and healthcare administrators should prioritize refining digital systems to address highlighted challenges, improving efficiency, and streamlining healthcare delivery.

Income Disparities Mitigation

The link between income levels and healthcare access underscores the need for targeted policies to reduce disparities. Initiatives enhancing income equity not only improve health outcomes but also foster increased adoption of digital health technologies. Bridging the income gap should be integrated into broader healthcare strategies for comprehensive societal benefit.

Tailored Digital Health Initiatives

Recognizing diverse capacities within income groups, our study suggests tailoring initiatives to specific socio-economic contexts. Strategies considering the financial capacities of diverse populations can lead to more inclusive digital health adoption, ensuring technology benefits all segments of society.

Addressing Challenges and Future Research

Our study highlights challenges in digitization and income disparities, prompting future research endeavors. Delving deeper into these challenges can offer nuanced insights, informing targeted interventions and contributing to the development of more precise and effective strategies.

In conclusion, our research aligns with existing literature and provides actionable insights for policymakers, healthcare practitioners, and researchers. By addressing identified challenges and

leveraging associations between digitization, income, and health, we move towards a healthcare landscape that is both technologically advanced and socially equitable.

Conclusion

This research provides intriguing responses to critical inquiries that have arisen during a period of heightened utilization of information and communication technology (ICT) and widespread digital entry into various services and facets of existence. Wellness is often perceived as the utmost valuable asset and an essential human requirement for existence. The accessibility and quality of healthcare services frequently shape individuals' preferences when choosing a community or even a nation as their place of residence, both for themselves and their families. Over the past few years, we have witnessed a remarkable surge in technological progress, specifically in the fields of artificial intelligence and digitalization. Technology has ingrained itself deeply into our societal existence, assuming a central role in every facet of our lives, including work, education, interpersonal connections, communication, market dynamics, and even matters concerning health and illness. Consequently, the subject investigated by this study, along with its corresponding findings, emerges at a highly opportune moment, enabling captivating projections for the future and forging essential connections to foster sustainable social policies. These policies aim to enhance individual services, ensuring the ongoing advancement and prosperity of society. In relation to the hypothesis that digitization and technology contribute to individuals' health, the results indicate that technology and its modern tools significantly assist individuals in accessing high-level healthcare services.

Concerning the hypothesis suggesting that income level affects the digitization of health, this study reveals that a higher per capita income facilitates access to digital and technological advancements, thereby promoting easier digital access to healthcare services. Furthermore, there appears to be a direct relationship between income level and access to digital health services. These findings suggest that this pattern may hold true for individuals residing in developed societies, such as the UAE. Importantly, the hypotheses of this study align with previous research conducted in other countries, enhancing the robustness of the presented results.

Implications

This study holds significant implications, providing valuable empirical evidence to guide decision-makers in communities as they navigate their developmental journeys. The goal is to offer high-quality services and effectively serve the residents, ultimately paving the way for a brighter future for the entire community under their care. Moreover, there is potential to expand the scope of this study to the national and even global level, maximizing its benefits and creating added value through information-based policies and future innovations. To accomplish this, it is recommended that the study be conducted longitudinally to obtain comprehensive insights. It is highly advised to apply these findings in communities within developing countries, ensuring their positive impact on societal progress.

The study has two limitations: Data collection methods, where limitations in the methods used for data collection, such as data collected from the internet and Facebook, can introduce bias or errors; and resource constraints, where limited time, budget, or access to certain resources may affect the depth and breadth of the research. It is worth noting that the rapid digitization of health services has emerged as a pressing phenomenon for all societies worldwide. Over 70% of countries have made substantial investments in digital health initiatives, with the goal of improving access to and delivery of healthcare. This surge in technological advancement has given rise to innovative solutions, including telemedicine, wearable devices, and health applications, thereby revolutionizing the landscape of healthcare delivery (World Health Organization).

In developed societies such as the UAE, where higher income levels prevail, the adoption of digital health technologies has been particularly prominent. The UAE government has made substantial investments in healthcare infrastructure and digital transformation, recognizing the potential of technology to improve healthcare outcomes. Consequently, the country has experienced a surge in digital health services, including online consultations, electronic health records, and remote monitoring systems, enabling individuals to conveniently access healthcare services and manage their well-being.

The findings of this study align with the global trend of leveraging technology to improve healthcare access and quality. By emphasizing the importance of income level as a facilitator of digital health access, the study illuminates existing disparities in healthcare provision. This underscores the necessity for policymakers in narrowing the digital divide and ensuring equitable

access to digital health services for all individuals, irrespective of their income level or geographic location.

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