English Section

Information Literacy of Egyptians Regarding Medical ID Records on Smart Phones : Qualitative Study

Dr. Zeinab Salaheldin Said

Lecturer at Information Science department,
Faculty of Arts, Helwan University
Dr.zeinab_salah@arts.helwan.edu.eg
https://orcid.org/0000-0002-9114-8830

Date Received : 13 August 2024 **Date Acceptance : 30 August 2024**

Abstract:

Health literacy is a crucial area of focus for information literacy, particularly for advancing public health in a nation and addressing basic preventative concerns. Medical identification (ID) is a critical source of valuable information. The fastest approach to save lives is to have accurate and reliable medical information about patients. Having a medical ID makes it easier for primary care providers to access vital medical information about a patient's condition and emergency contact details. The study aims to measure the information literacy of Egyptians regarding medical identity (ID) records on smartphones as a primary source of information in emergencies. The scope of the study focuses on the use of the Medical ID feature, available for free on Android and iOS smartphones, in emergency situations in the Greater Cairo area of Egypt in 2023, avoiding any other health applications downloaded on smartphones. The qualitative approach was adopted in the study, which is predicated on collecting qualitative data through an examination of attitudes and behavior in participants, study using a standardized electronic questionnaire distributed via Google Form. The results of the study showed that 42% of participants were aware of the medical ID feature on smartphones. After reading the questionnaire's introduction, 51% understood its function, significance, and usage, while 21% were already aware and had used it. The awareness level of medical ID features on smartphones was higher among females (55%, aged 18–22), and those with a university education (77%). However, 28% of those who were aware of the medical ID feature on smartphones did not use it, with 46% of them lacking some personal medical information, such as their blood type. Despite the potential of medical ID to save lives, the study found a low level of information literacy among Egyptians regarding medical ID records on smartphones, coupled with a significant lack of personal health information.

Keywords: Information literacy; Health Awareness; Medical ID; Egyptians Awareness; Smartphones Features.

Introduction:

Information literacy is not just a library-related issue anymore. It has become a matter that affects the country and all its institutions. In the information age we live in, the process of finding, collecting, classifying, analyzing, and processing data to reach unified information based on scientific analysis simplifies, accelerates, and enhances the reliability of decision-making.

One of the most crucial areas of focus for information literacy is health literacy. It is necessary for advancing public health in a nation, particularly regarding basic preventative measures. The WHO defines health literacy as the cognitive and social skills that determine an individual's motivation and ability to access, understand and use information in ways that promote and maintain good health?" (WHO, Track 2: health literacy and health behavior, 2010).

The importance of health information literacy stems from individuals' increasing need for health information and their inability to judge such information (Shehata, 2021). One of the most important elements in adopting healthy living practices is health literacy.

Medical Identification (ID) serves as a primary source of health information and plays a vital role in the treatment of emergency cases. Having accurate and reliable patient medical information of patients is the fastest way to save lives.

Medical ID is a feature that helps first responders access your important medical information from your lock screen without needing your passcode. They can see information like allergies and medical conditions, as well as who to contact in an emergency. (Commission, 2023).

With enhancement in technology, Medical ID has been implemented on smartphones, providing a secure way to store medical information. Moreover, smartphones are always with the patient. In contrast, older methods, such as keeping medical information on a handwritten piece of paper, are less reliable or secure. Handwritten notes can be easily lost, may be difficult to read or view, and may not provide comprehensive information to primary healthcare service providers (Whitehead & Hunter, 2023).

Medical IDs fall into two main categories: Devices and Software. Medicals ID devices are portable electronic devices, such as smart watches, bracelets, medical USBs, accessories, and medical ID cards, that store the holder's medical information. Some of these devices require additional equipment to read the information and may also need authentication for access. On the other hand, software medical IDs are applications on smartphones. They come in two types: Independent Applications or Operating System Features.

The study focuses on the operating system features because they are automatically available with the phone's operating system, do not require specific devices to read the information installed on them, and do not require the Internet to work. On Android phones, the user can access the medical ID feature by swiping up on the lock screen, selecting "Emergency Call," selecting the "Medical Information" location on the emergency screen, and then accessing the medical ID screen with the relevant medical information, as illustrated in (Figure 1). For iPhone users, they can access their medical ID information through the "Emergency" location on the Lock screen, then the "Medical ID" location on the Emergency screen. Then the Medical ID screen with the relevant medical information, as illustrated in (Figure2).

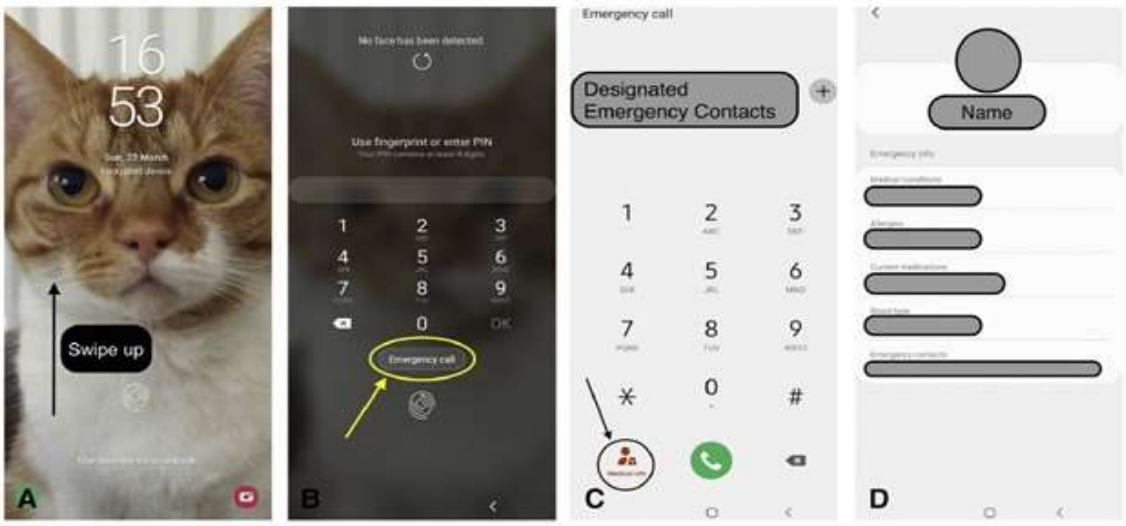

Figure 1 How to activate the medical ID feature on Android phones1

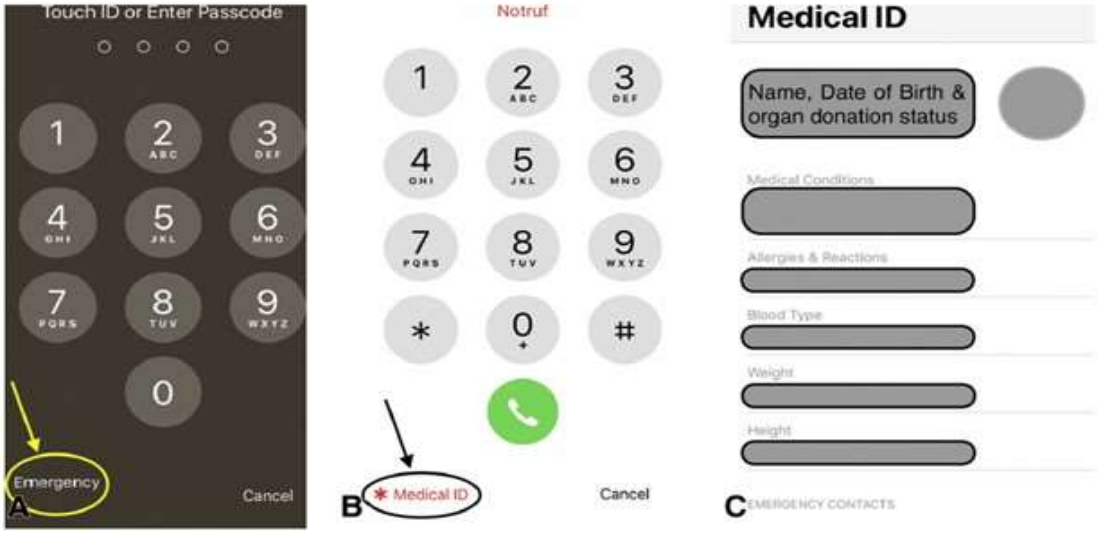

Figure 2 How to activate the medical ID feature on phones running iOS2

About 75% of Egyptian families own smartphones (CAPMAS, 2021), which is why this software is widely accessible to most citizens of all classes. Notably, Egypt does not have an automated health system that integrates health data for its citizens yet. Even though President Sisi issued Comprehensive Health Insurance Law No. 2 of 2018, mandating health care coverage for all Egyptians and the creation of a health database linking citizens' health data with service providers and doctors across the country, the automated health system and database integration remain incomplete. These are the last steps required to complete the health insurance system, projected to be completed by 2032 (Presidency, 2020). Although the level of health literacy among the Egyptians has not been adequately described, and few studies have identified its key aspects (Essam, Khafagy, & Alemam, 2022), this paper measures Egyptians' awareness of medical ID

1Sandler, R. D. (2020, March 23). MOBILE MEDICAL ID: A RESOURCE FOR THE OFF-DUTY CLINICIAN. The Journal of Emergency Medicine, 59(1), pp. 141-142. doi:10.1016/j.jemermed.2020.03.040

2 Ibid

on smartphones as a primary source of medical information in emergencies, especially for those with non-communicable diseases. Non-communicable diseases, including cardiovascular diseases, diabetes, cancer, and chronic respiratory diseases, are currently the leading national cause of death in Egypt. It is estimated that non-communicable diseases are responsible for 82% of total deaths and 67% of premature deaths (WHO, Noncommunicable diseases, 2023).

Emergencies are unpredictable, but preparation is key. Ensuring basic health information is available with the patient, up to date, accurate, and easy to access is vital since patients may not be able to provide the necessary information during emergencies. For this very reason, smartphones are equipped with emergency applications such as Medical ID and Emergency ID (Kaczmarek, et al., 2021). The World Health Organization (WHO) points out that some estimates suggest up to 4 in 10 patients are harmed in primary and ambulatory facilities, with up to 80% (23.6-85%) of this harm being avoidable (WHO, Patient safety, 2023). For example, in emergency situations, such as car accidents, epilepsy or heart attacks, the first few minutes are crucial and can determine survival, so the response must be as fast and accurate as possible (Martín & Lantada, 2020). Hence, the American Society of Emergency Physicians stressed the necessity of using different medical identities for patients, as they provide valuable information to health care providers in critical emergency situations, especially when the patient comes to a hospital in which he does not have a medical record or unconscious (Jamjoom, Abualfraj, Mogaddam, Aljohani, & Aseeri, 2021).

Literature review:

As shown in the study by Al-Alwan and his colleagues, there is limited literature worldwide concerned with medical identities (ID) and their critical importance, with no study has assessing knowledge and attitudes toward medical IDs globally, especially in Middle Eastern regions (Al-Alwan, Al-Saeed, Hasaaen, & Mohaini, 2020). Most studies evaluating smartphone use in medicine have focused on enhancing communication and medical decision-making, educating patients and providers, and tracking disease processes over time (Vella, Li, Reilly, & Razaa, 2020).

The purpose of Jamjoom and colleagues' study was to gauge public awareness in Jeddah, Saudi Arabia, regarding various forms of medical identification on smartphones. It was a qualitative cross-sectional study, and the results showed that 36.3% of respondents were aware of these features, with females being more aware and significant correlations between awareness and age and education level. Among those who were aware of medical ID, the most popular and often utilized form was the medical ID function found on smartphones (Jamjoom, Abualfraj, Mogaddam, Aljohani, & Aseeri, 2021).

The aim of Rogers and colleagues' study was to determine the value of smartphone emergency medical identification ("SEMID") applications in the immediate management of trauma patients who cannot provide a medical history for any reason for their presence and who are 16 years of age or older. The study included one hundred and forty-three patients. The procedures were divided into two parts: First, if emergency medical services employees have the patient’s smartphone, they will be questioned about it. Second, cell phones were searched among the patient's personal items. When a smartphone was found, the team member tried to open it and see what smartphone emergency medical identification “SEMID” data could be accessed. 21% of patients arrived with a smartphone, and 90% of them could be reached. Of these individuals, 30% used the “SEMID” app, and “SEMID” information was relevant to patient care in

75% of cases. The study confirms that there is an urgent need to improve awareness and utilization of SEMID. (Rogers, et al., 2023).

While Vella and colleagues' study compared a convenience sample of adult trauma patients (age ≥18 years) as well as patient family members and multidisciplinary providers from an urban Level I trauma center, The study concluded that out of the 338 participants, 182 (54%) were smartphone owners and 91% were providers. Of the owners, 51% were aware that there was smartphone emergency medical identification, but only 31% used it. Only 21% of the 123 physicians who came across unresponsive patients with smartphones asked for smartphone emergency medical identification, and 73% of them felt it was beneficial. When asked about their smartphone emergency medical identity, all non-providers (100%) who said they had done so felt it was helpful. Regarding smartphone emergency medical identification awareness and utilization, there were no differences between the groups. The study also proved that smartphone emergency medical identification technology is underused despite its potential benefits. (Vella, Li, Reilly, & Razaa, 2020).

Objective:

The study aims to assess Egyptians' information literacy regarding medical identity (ID) records, available as a feature on smartphones in emergencies in Egypt's Greater Cairo Region in 2023.

Scope of study and limits:

The scope of the study focuses on the use of the Medical ID feature, available for free on Android and iOS smartphones, in emergency situations in the Greater Cairo area of Egypt in 2023, avoiding any other health applications downloaded on smartphones.

Materials and Methods:

Study Design and Data Collection:

The qualitative approach was adopted in the study, which is predicated on collecting qualitative data through an examination of attitudes and behavior in participants. This qualitative study conducted its questionnaire between November and December 2023 in Egypt's Greater Cairo Region. The population estimate for the Greater Cairo Region at the time was approximately 26,027,571 people (CAMPAS, 2023). The sample size is determined to be 385 people, with a confidence level of 95 % and a margin of error of 0.5 %. The snowball sampling method was used to reach the maximum number of beneficiaries.

Questionnaire:

The questionnaire, published to the public in Arabic via a Google Form link, was distributed through email and social media to beneficiaries in the Greater Cairo Region. To avoid duplication of responses, email addresses were required for submission. The questionnaire aimed to analyze Egyptians' literacy of the medical ID feature on smartphones. Inclusion criteria were people aged between eighteen and sixty years residing in the Greater Cairo Region, owning and using smartphones with compatible operating systems (Android 12 and above, iOS 8 and above). Both major smartphone operating systems, Apple (iOS) and Google (Android), offer a built-in feature that allows users to store medical identification such as age, medical conditions, medications, allergies, blood type, organ donation status, other health-related notes, and emergency contact information. The questionnaire comprised three main sections: an

introduction providing medical ID definition usage instructions, and approval to participate in the study, followed by general demographic data (gender, age, level of education, type of smartphone, presence of any chronic medical condition, medication intake for chronic diseases), and finally awareness of medical IDs and reasons for using or not using them despite knowledge of their existence.
Participation in this study was voluntary, and the identification information of participants was not recorded anywhere on the questionnaire. The questionnaire was examined and validated in terms of content and importance by two nursing professors and two information science professors.

Data Analysis:

The chi-square test was selected as the statistical method to identify associated significant variables. Chi-square tests are commonly used to analyze contingency tables (tables of variables) of observed values for large sample sizes. 385 (as our sample size) out of a total of 467 participants completed the questionnaire, with 82 respondents excluded due to conflicts and not meeting the study criteria.

Results:

Demographic characteristics :

Out the total participants, 161 (41.8%) were male, and 224 (58.2%) were female. The highest numbers of participant fell within the 18 – 22 age range, comprising 181 (47%) respondents, followed by 90 (23.4%) in the 23 – 30 age range. Approximately similar numbers of participants were in the 31 – 40 years with 53 (13.8%) and the41 – 51 age range with 59 (15.3%). Finally, only 2 (0.5%) participants were in the 52 – 62 age range. (Table 1)
Regarding educational level, the majority of participants held university degrees, constituting 305 (79.2%) of the participants, followed by undergraduate participants with 29 (7.5%). A similar number of participants held higher diplomas with 26 (6.8%) and Master/Doctorate degrees with 25 (6.5%). In terms of smartphone type, most of participants owned Android smartphones, with 325 (84.4%), compared to 60 (15.6%) who owned iOS smartphones.

Table 1 Demographic characteristics

Demographic characteristics		N	%
Sex	**male**	161	41.8%
	female	224	58.2%
Age	**18:22**	181	47.0%
	23:30	90	23.4%
	31:40	53	13.8%
	41:51	59	15.3%
	52:62	2	0.5%
Education level	**Higher Diploma**	26	6.8%
	University	305	79.2%
	Master's - Doctorate	25	6.5%
	Pre-university	29	7.5%
Smartphone type	**Android (Samsung, Huawei ...)**	325	84.4%
	IOS(iPhone)	60	15.6%

Chronic diseases/ special care distribution:

Out of the participants, 47 (12.2%) reported suffering from chronic diseases or requiring special care, with 32 taking medication for these conditions, while 338 (87.8%) did not have chronic diseases. The most common chronic diseases among participants were other diseases 19 (33%), followed by Hypotension-Hypertension diseases 15 (26%). Diabetes affected 9 (15%) participants, while 8 (14%) reported allergies. Participants with cardiac diseases numbered 4 (7%) and asthma and cancer were the lease prevalent, with 2 (3%) and cancer with 1 (2%) respectively (Table 2).

Table 2 Chronic diseases distribution.

Chronic diseases characteristics		N	%
Do you have a chronic disease or need special care?	**Yes**	47	12.2%
	no	338	87.8%
If the answer to the previous question is yes, mention the type of disease	**Hypotension-Hypertension**	15	26%
	Other diseases	19	33%
	Cardiac diseases	4	7%
	Allergies	8	14%
	cancer	1	2%
	Diabetes	9	16%
	asthma	2	3%
Are you taking medication for a chronic disease?	**Yes**	32	8.3%
	no	353	91.7%

Medical ID awareness:

(Table 3) indicates, the relationship between variables of the sample's characteristics and awareness of medical ID was analyzed using p-value calculation from chi-square statistics, with significant p-value <0.05. Most variables were not significant to awareness of medical ID, except for smartphone type and the presence of chronic diseases or the need for particular care, as shown in (Figure 3).

Table 3 Awareness of medical ID available on smartphone

	Question	**Are you aware of the medical ID available on your smartphone? Medical ID, or, Medical Info**		**p-Value**
Variables		Yes	No (if the answer is no, please complete the questionnaire)	
Sex	male	74	87	0.26
	female	90	134	
	Total	164	221	
Age	18:22	75	106	0.49
	23:30	45	45	
	31:40	22	31	
	41:51	21	38	
	52:62	1	1	
	Total	164	221	

	Question	Are you aware of the medical ID available on your smartphone? Medical ID, or, Medical Info		p-Value
Education level	Higher Diploma	11	15	0.85
	University	127	178	
	Master's - Doctorate	12	13	
	Pre-university	14	15	
	Total	164	221	
Smartphone type	Android (Samsung, Huawei,)	126	199	<0.001*
	IOS (iPhone)	38	22	
	Total	164	221	
Do you have a chronic disease or need special care?	Yes	30	17	<0.001*
	no	134	204	
	Total	164	221	
Are you taking medication for a chronic disease?	Yes	18	14	0.10
	no	146	207	
	Total	164	221	

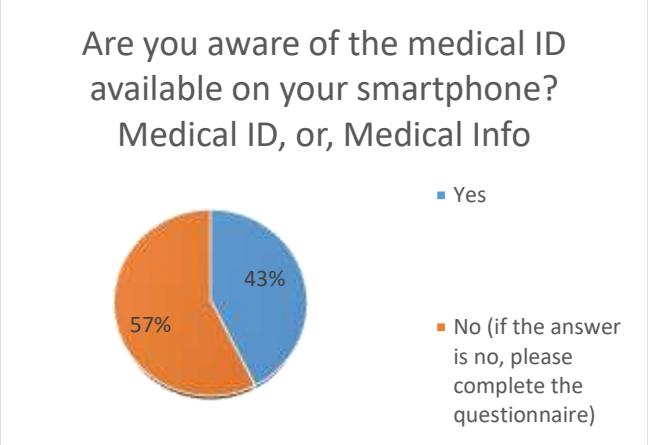

Figure 3 The awareness of medical IDs of the participants

Medical ID recognition and usage

Table (4) measure the relationship between variables in the sample regarding participants' knowledge about medical ID, chi-square statistics with a significant p-value <0.05 were utilized. All variables were not significant except for the type of smartphone.

Table 4 Medical ID recognition and usage

	Question	If your previous answer is yes, choose from the following			
Variables		**Find out the medical ID available on my phone and use it**	**I recognized it from the questionnaire and will use it**	**know it but don't use it (please go to the last question)**	**P-Value**
Sex	male	18	34	22	0.53
	female	17	49	24	
	Total	35	83	46	
Age	18:22	11	45	19	0.26
	23:30	11	21	13	
	31:40	7	9	6	
	41:51	5	8	8	
	52:62	1	0	0	
	Total	35	83	46	
Education level	Higher Diploma	4	4	3	0.15
	University	28	68	31	
	Master's - Doctorate	3	4	5	
	Pre-university	0	7	7	
	Total	35	83	46	
Smartphone type	Android (Samsung, Huawei,..)	22	71	33	<0.001*
	IOS (iPhone)	13	12	13	
	Total	35	83	46	
Do you have a chronic disease or need special care?	Yes	8	17	5	0.29
	no	27	66	41	
	Total	35	83	46	
Are you taking medication for a chronic disease?	Yes	7	7	4	0.16
	no	28	76	42	
	Total	35	83	46	

Reason for using your medical ID.

Having chronic diseases or needing particular care and taking medication for chronic diseases were the only significant variables regarding the reasons for using medical ID, with a p-value <0.05 (Table 5).

Table 5 Reason for using your medical ID

	Question	**State the reason for using your medical ID (you can choose more than one answer)**			
Variables		**Because of its importance in case of emergency**	**Used it because of friends' recommendations**	**because I have a chronic illness - or - I need special care**	**P-Value**
Sex	male	49	22	3	0.87
	female	64	24	4	
	Total	113	46	7	
Age	18:22	52	29	5	0.66
	23:30	34	10	1	
	31:40	12	3	0	
	41:51	14	4	1	
	52:62	1	0	0	
	Total	113	46	7	
Education level	Higher Diploma	8	2	0	0.53
	University	90	39	6	
	Master's - Doctorate	7	0	0	
	Pre-university	8	5	1	
	Total	113	46	7	
Smartphone type	Android (Samsung, Huawei,.....)	86	42	6	0.08
	IOS (iPhone)	27	4	1	
	Total	113	46	7	
Do you have a chronic disease or need special care?	Yes	23	8	6	<0.001*
	No	90	38	1	
	Total	113	46	7	
Are you taking medication for a chronic disease?	Yes	13	3	3	0.02
	No	100	43	4	
	Total	113	46	7	

Reason of not using medical ID.

Age and education level were the significant variables regarding the reasons for not using medical ID, with a p-value <0.05. All other variables were considered not significant (Table 6).

Table 6 Reason of not using medical ID.

	Question	**State the reason why you do not use the medical ID on your smartphone even though you know about it (you can choose more than one answer)**			
Variables		I feel that it will not be used in emergency situations	There is information that I do not know about myself- such as blood type	I know it's important- but I'm too lazy to fill out the information	P-Value
Sex	male	19	30	18	0.93
	female	20	33	17	
	Total	39	63	35	
Age	18:22	14	42	13	<0.001*
	23:30	13	18	6	
	31:40	6	2	8	
	41:51	6	1	7	
	52:62	0	0	1	
	Total	39	63	35	
Education level	Higher Diploma	4	2	3	<0.001*
	University	24	55	27	
	Master's - Doctorate	5	0	3	
	Pre-university	6	6	2	
	Total	39	63	35	
Smartphone type	Android (Samsung, Huawei,..)	26	52	30	0.08
	IOS (iPhone)	13	11	5	
	Total	39	63	35	
Do you have a chronic disease or need special care?	Yes	11	9	8	0.22
	no	28	54	27	
	Total	39	63	35	
Are you taking medication for a chronic disease?	Yes	4	5	4	0.84
	no	35	58	31	
	Total	39	63	35	

Discussion:

The results of the study showed that 42% of participants were aware of the medical ID feature in smartphones, higher than the awareness reported among citizens in Jeddah (Jamjoom, Abualfraj, Mogaddam, Aljohani, & Aseeri, 2021), which was 36.3%. Among the aware group, 51% learned about the medical ID, its importance, and usage from the questionnaire introduction, while 21% had prior knowledge and usage. Female participants showed higher awareness at 55%, particularly those aged 18-22, and 77% of them had a university education, These results align with previous research by Jamjoom et al. (Jamjoom, Abualfraj, Mogaddam, Aljohani, & Aseeri, 2021) This result is not statistically significant in both studies because the number of female respondents to the questionnaire was greater than the number of male respondents, which justifies the high percentage of females in the rest of the responses.
Among the aware group, 68%used medical ID on smartphones because of its importance in emergencies, while 28% did so based on recommendations from friends.

The results of the study showed that of those aware but not using medical ID (28%), reasons included lack of certain medical information about themselves, such as blood type (46%), skepticism about its use in emergencies 28%, and laziness in filling it despite their knowledge of its importance (26%).

Conclusion:

Although medical ID can help save the lives of many patients, the measured level of information literacy among Egyptians regarding medical ID records on smartphones is low, in addition to the significant lack of personal health information about themselves.
As this study is the first to shed light on Medical ID awareness in Egypt, the significant variables identified in this research should serve as a guideline for future studies, aiming to provide more focused and accurate results.

Recommendations:

Based on these findings, this study recommends that the Egyptian Health Care Authority initiate awareness campaigns highlighting the importance of using medical ID on smartphones. These campaigns should target the Egyptian population and primary healthcare service providers.

Limitations:

The limitation encountered in the literature evaluation process was the paucity of research on smartphone medical ID features.

Competing Interest:

The author declares no competing interests.

Informed consent:

Informed consent was obtained from every participant, Confidentiality was guaranteed for all information provided, the author began the questionnaire with a statement asking participants to read the information about the study below and indicate whether they would like to participate or not, and no personal identifiers were used in the questionnaire.

References:

- Al-Alwan, M. A., Al-Saeed, A. A., Hasaaen, Q. A., & Mohaini, M. A. (2020). Medical identification tag. Are we aware:Cross-sectional, population-based study. *International Journal of Medicine in Developing Countries, 8*(4), 1154–1159.
- CAMPAS. (2023, 11 12). *Current population*. (Central Agency for public mobilization and statistcs) Retrieved 11 12, 2023, from www.campas.gove.ef
- CAPMAS. (2021). *Arab Republic of Egypt - Health Survey for the Egyptian Households 2021*. Egypt: CAPMAS. Retrieved Oct 18, 2023, from https://censusinfo.capmas.gov.eg/Metadata-en-v4.2/index.php/catalog/665/related_materials
- Commission, T. J. (2023). *Setting up the Medical ID in the Health app on your iPhone*. (The Joint Commission) Retrieved November 2, 2023, from Apple Support: https://www.jointcommission.org/-/media/tjc/documents/resources/for-consumers/takecharge/iphone-app---medical-id-instructions.pdf
- Essam, N., Khafagy, M. A., & Alemam, D. S. (2022). Health literacy of pregnant women attending antenatal care clinics in Mansoura district, Egypt. *Journal of the Egyptian Public Health Association, 97*(24), 2-9. doi:10.1186/s42506-022-00119-z
- Jamjoom, M., Abualfraj, A. S., Mogaddam, A. S., Aljohani, A. A., & Aseeri, F. (2021). Public awareness of the medical ID feature on smartphones in Jeddah in 2020. *Saudi Journal of Emergency Medicine*, 250-256.
- Kaczmarek, C., Andruszkow, H., Herren, C., Pishnamaz, M., Hildebrand, F., Röhl, A., & Lichte, P. (2021). Medical ID and emergency apps: A useful tool in emergency situations or a waste of time. *Med Klin Intensivmed Notfmed, 116*(4), 339-344.
- Martín, A. Q., & Lantada, A. D. (2020). Original software publication: An open source medical passport based on an Android mobile application and near-field communication. *SoftwareX, 11*(100492), 1-7.
- Presidency. (2020, Feb). *The first stage of mechanization of the new comprehensive health insurance project*. Retrieved Nov 28, 2023, from The Arab Republic of Egypt Presidency: https://www.presidency.eg/ar/%D8%A7%D9%84%D9%85%D8%B4%D8%A7%D8%B1%D9%8A%D8%B9-%D8%A7%D9%84%D9%82%D9%88%D9%85%D9%8A%D8%A9/%D8%A7%D9%84%D9%85%D8%B1%D8%AD%D9%84%D8%A9-%D8%A7%D9%84%D8%A3%D9%88%D9%84%D9%89-%D9%85%D9%86-%D9%85%D9%8A%D9%83%D9%86%D8%A9-%D9%85%D8%
- Rogers, E. J., Reidlinger, T., Loria, A., Oplinger, A., Raza, S. S., Gestring, M. L., & Vella, M. A. (2023). Medical Information During Trauma Resuscitations: Are Smartphones the Contemporary Medical ID Bracelet. *journal of surgical research*(291), 313-320. doi:10.1016/j.jss.2023.06.024
- Sandler, R. D. (2020). MOBILE MEDICAL ID: A RESOURCE FOR THE OFF-DUTY CLINICIAN. *The Journal of Emergency Medicine, 59*(1), pp. 141-142. doi:10.1016/j.jemermed.2020.03.040
- Sandler, R. D. (2020, March 23). MOBILE MEDICAL ID: A RESOURCE FOR THE OFF-DUTY CLINICIAN. *The Journal of Emergency Medicine, 59*(1), pp. 141-142. doi:10.1016/j.jemermed.2020.03.040

- Selden, C. R., Ratzan, S. C., Parker, R., & Zorn, M. (2000). *Health Literacy*. National Library of Medicine.
- Shehata, A. (2021). Health Information behaviour during COVID-19 outbreak among Egyptian library and information science undergraduate students. *Information Development, 37*(3), 417-430. doi:https://doi.org/10.1177/0266666920976181
- Sørensen, K., Broucke, S. V., Fullam, J., Doyle, G., Pelikan, J., Slonska, Z., & Brand, H. (2012). Health literacy and public health: A systematic review and integration of definitions and models. *BMC Public Health, 25*(12), 1-13. doi:https://doi.org/10.1186/1471-2458-12-80
- Vella, M. A., Li, H., Reilly, P. M., & Razaa, S. S. (2020). Unlocked yet untapped: The ubiquitous smartphone and utilization of emergency medical identification technology in the care of the injured patient. *Surg Open Sci, 2*(3), 122-126. Retrieved from https://pubmed.ncbi.nlm.nih.gov/32754716/
- Whitehead, C., & Hunter, K. (2023, 10 23). *How to add medical information to your Android phone Android phone*. (Android Police) Retrieved 11 2, 2023, from https://www.androidpolice.com/how-to-add-medical-information-android/
- WHO. (2010). *Track 2: health literacy and health behavior*. Retrieved from World Health Organization: http://www.who.int/healthpromotion/conferences/7gchp/track2/en/index.html
- WHO. (2023). *Noncommunicable diseases*. (World Health Organization) Retrieved Oct 22, 2023, from World Health Organization: https://www.emro.who.int/egy/programmes/noncommunicable-diseases.html
- WHO. (2023, Sep 11). *Patient safety*. Retrieved Oct 22, 2023, from World Health Organization: https://www.who.int/news-room/fact-sheets/detail/patient-safety

ملحق (1): استبيان الدراسة

استخدام سجلات الهوية الطبية على الهواتف الذكية

Using Medical ID (or) Medical Info, on smart phones

برجاء قراءة المعلومات حول الدراسة أدناه، وبيان ما إذا كنت ترغب في المشاركة أم لا؟

يتم إجراء دراسة عن استخدام الهوية الطبية على الهواتف الذكية، وهذا الاستبيان هو جزء مهم من هذه الدراسة، ويحتاج إلى حوالي (3– 5) دقائق فقط من وقتك، علمًا بأنه سيتم التعامل مع جميع الإجابات التي تقدمها على الأسئلة التالية بسرية تامة.

الهوية الطبية = Medical ID

الهوية الطبية هي مجموعة البيانات التي توضح الحالة الطبية لصاحب الهاتف، والأمراض المزمنة لدية والأدوية الخاصة به وأية معلومات طبية مهمة أخرى، وتكون مثبتة على نظام التشغيل الرئيسي للهاتف، ويمكن الوصول لها بدون الحاجة إلى رمز المرور.

ملحوظة مهمة: يعتبر ملء الاستبيان موافقة منك على الاشتراك في البحث.

النوع:

- **ذكر.**
- **أنثى.**

السن:

- **18:22**
- **23:30**
- **31:40**
- **41:51**
- **52:62**

مستوى التعليم:

- **ما قبل الجامعي.**
- **دبلوم عالي.**
- **جامعي.**
- **ماجستير/ دكتوراه.**

نوع الهاتف الذكي:

- **(iPhone) iOS**
- **Android (Samsung, Huawei, ….)**

هل لديك مرض مزمن أو تحتاج رعاية خاصة؟

- **نعم**
- **لا**

إذا كانت الإجابة على السؤال السابق بنعم اختر نوع المرض:

- **سكر**
- **ضغط**
- **حساسية**
- **ربو**
- **قلب**
- **سرطان**
- **أمراض أخرى**

هل تتناول دواء لمرض مزمن؟

- **نعم**
- **لا**

هل أنت على علم بالهوية الطبية المتوافرة على هاتفك؟ (Medical ID or Medical Info)

- **نعم**
- **لا (إذا كانت الإجابة بلا من فضلك انهِ الاستبيان)**

إذا كانت اجابتك السابقة بنعم، من فضلك اختر مما يلي:

- **أعرف الهوية الطبية المتوافرة على هاتفي واستخدمها.**
- **تعرفت عليها من الاستبيان وسوف أستخدمها.**
- **أعرفها لكن لا استخدمها (من فضلك انتقل إلى السؤال الأخير).**

اذكر سبب استخدامك للهوية الطبية؟ (يمكنك اختيار أكثر من إجابة)

- **بسبب أهميتها في حالة الطوارئ.**
- **لأن عندي مرض مزمن/ أو/ أحتاج رعاية خاصة.**
- **استخدمها بسبب توصيات الأصدقاء.**

اذكر سبب عدم استخدامك للهوية الطبية على هاتفك الذكي بالرغم من علمك بها؟ (يمكنك اختيار أكثر من إجابة)

- **يوجد معلومات لا أعرفها عن نفسي مثل نوع فصيلة الدم.**
- **اشعر أنه لن تستخدم في حالات الطوارئ.**
- **أعرف أنه مهم، ولكني أتكاسل في ملء البيانات.**

محو الأمية المعلوماتية للمصريين تجاه سجلات الهوية الطبية للهواتف الذكية: دراسة نوعية

د. زينب صلاح الدين سعيد
مدرس بقسم علم المعلومات
كلية الآداب– جامعة حلوان
dr.zeinab_salah@arts.helwan.edu.eg
https://orcid.org/0000-0002-9114-8830

تاريخ الاستلام: 13 أغسطس 2024 **تاريخ القبول: 30 أغسطس 2024**

المستخلص:

يُعد محو أمية المعلومات الصحية عنصر مهمًا لمحو الأمية المعلوماتية، وبخاصة للنهوض بالصحة العامة ومعالجة المخاوف الوقائية الأساسية في أي بلد، وتُعد الهوية الطبية مصدرًا بالغ الأهمية للمعلومات الطبية، لأنها أسرع طريقة لإنقاذ المرضى في حالات الطوارئ، و تساعد مقدمي الرعاية الأولية في الحصول على معلومات طبية دقيقة وموثوقة عن المرضى، بالإضافة إلى المعلومات الطبية الحيوية حول حالة المريض، وقائمة الأشخاص الذين يمكن الرجوع إليهم في حالة الطوارئ، وتهدف الدراسة إلى قياس محو الأمية المعلوماتية لدى المصريين فيما يتعلق بسجلات الهوية الطبية على الهواتف الذكية كمصدر أساسي للمعلومات في حالات الطوارئ، ركزت الدراسة على استخدام ميزة الهوية الطبية المتاحة مجانًا على الهواتف الذكية في منطقة القاهرة الكبرى في مصر عام 2023، وتجنبت الدراسة أية تطبيقات صحية أخرى يتم تثبيتها على الهواتف الذكية، تم استخدام المنهج النوعي في الدراسة والذي يعتمد على جمع البيانات النوعية من خلال فحص مواقف وسلوكيات المشاركين، مستخدمة استبيانا إلكترونيا موحدا تم توزيعه عبر نموذج Google، وأظهرت نتائج الدراسة أن 42% من المشاركين على دراية بخاصية الهوية الطبية على الهواتف الذكية، وبعد قراءة مقدمة الاستبيان، فهم 51% وظيفتها وأهميتها واستخداماتها، بينما كان 21% على دراية بها واستخدموها بالفعل، وكان مستوى الوعي بخاصية الهوية الطبية على الهواتف الذكية أعلى بين الإناث (55%، في الفئة العمرية 18–22)، والحاصلات على تعليم جامعي (77%)، إلا أن 28% من الذين كانوا على دراية بخاصية الهوية الطبية على الهواتف الذكية لم يستخدموها، وكان 46% منهم يفتقرون إلى بعض المعلومات الطبية الشخصية، مثل: فصيلة الدم، وعلى الرغم من إمكانية الهوية الطبية في إنقاذ الأرواح، إلا أن الدراسة وجدت انخفاض مستوى الثقافة المعلوماتية بين المصريين فيما يتعلق بسجلات الهوية الطبية على الهواتف الذكية، بالإضافة إلى نقص كبير في المعلومات الصحية الشخصية.

الكلمات المفتاحية: الثقافة المعلوماتية؛ الوعي الصحي؛ الهوية الطبية؛ وعي المصريين؛ ميزات الهواتف الذكية.