

The Perceptions and Acceptance of General Population toward the National Health Insurance Program in Iraq

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Abstract

This study aimed to measure the general population's perceptions and acceptance of the new national health insurance program to overcome any implementation obstacles. This cross-sectional study utilized an electronic survey administered via Google Forms, which was disseminated through various social media platforms. Recruitment occurred from February to September 2023, resulting in 562 completed surveys. The majority of respondents were female (63.7%). Over half were university students (55.5%) and 24.4% were government employees. More than half (54.6%) were unaware of the health insurance plan details. Despite this, 76.7% supported and were willing to join the new insurance plan. Most (68.5%) found a monthly contribution of 1% of their salary reasonable. Approximately 71.2% believed the health insurance would improve public sector service quality and create competition with the private sector. Notably, 42% were dissatisfied with private health services compared to their cost, and 56% were dissatisfied with current semi-free public health services. Overall, there is a positive perception of the new health insurance plan, particularly in enhancing quality. Low satisfaction with current services and the affordability of the new plan would likely encourage people to join. Increased advertising campaigns are needed to raise awareness about the health insurance program's details. The study's findings can assist health officials in the health insurance program in addressing and alleviating public concerns.

Keywords: Acceptance, Awareness, Challenges, General population, Health insurance, Iraq

Introduction

Iraq's healthcare system has been seriously harmed by decades of violence, international sanctions, and a lack of attention to the health sector. As a result, many trained doctors and other medical professionals have left the country ⁽¹⁾. The so-called "dual practice" in Iraq, wherein medical professionals working for the government also offer their services to the private sector, is to blame for the public sector's human resource deficit. The provision of free healthcare services to citizens at the point of use by public institutions may place a significant financial strain on the government budget ⁽²⁾. Iraq's health expenditure as a percentage of gross domestic product (GDP) remains relatively modest, standing at 4.29% in 2022. In comparison, neighboring Middle Eastern countries such as Jordan (6.83%), Lebanon (5.74%), Saudi Arabia (4.62%), United Arab Emirates (4.68%), and Kuwait (4.27%) exhibit varying levels of spending. It's worth noting that the GDPs of Gulf countries tend to be significantly higher than that of Iraq,

which influences these expenditure percentages. ^(3,4). For the entire population, government spending on pharmaceuticals came to US\$ 1.25 billion, or 25% of overall health spending ⁽²⁾. Consequently, the primary funding source for healthcare comes from out-of-pocket (OOP) expenses. With 58% of the current health expenditure, Iraq has the highest out-of-pocket spending among the neighboring countries. Comparatively, Iran spends 35.83% of its income out of pocket, Jordan pays 30.67%, Turkey pays 17.49%, Saudi Arabia pays 14.37%, and Kuwait pays 10.82% ⁽⁴⁾. Different strategies were used by the health systems of the neighboring countries to reduce the expense of healthcare for their populations. For examples, these countries are striving to afford their population access to health services in the most efficient way through providing universal health coverage (UHC), a concept that has been supported by the United Nations (UN) and World Health Organization (WHO). This implies the access to quality health services for all

people without the risk of exposure to poverty as a result of payment for these services ⁽⁵⁾.

Global healthcare expenses are rising, and Iraq is not exempt from these increases. There are currently 44 million people projected to live in Iraq ⁽⁶⁾. According to the Iraqi Directorate of Population and Manpower Statistics, 51,211,700 individuals are expected to be counted in the country's population by 2030 ⁽⁷⁾. The financing of healthcare is a critical and pressing issue due to population growth, aging, and changing diseases patterns. Furthermore, the quality and accessibility of public healthcare services have long been problems, and the free health care model has increased overuse and prolonged wait times for specialists and hospitals ^(8,9).

In 2021, the Iraqi Health Insurance Law (IHIL) was approved ⁽¹⁰⁾. Participants, or beneficiaries, are required to pay a premium each month equal to 1.0% of their salary, with the exception of high-ranking government officials, who are required to pay 2.5 percent from their salary monthly. The family members covered by this premium cost include the parents, unemployed spouse and children under 21 years old who are still enrolled in school. Individuals with terminal illnesses and those with low incomes will receive free coverage. The Ministry of Health (MOH) will continue to offer free public health services, including screenings and vaccinations, as well as emergency treatments in the public sector. For prescription drugs, lab work, X-rays, and medical dental services, the majority of insured consumers must pay a 25% co-insurance ⁽¹¹⁾. They should also cover 10% of the cost of the doctor's visit. The new Iraqi health insurance will be governed by the Health Insurance Authority (HIA), a governmental entity. Every month, HIA will get provider bills, consumer premiums, and provider reimbursements. Every patient needs to register with a physician, whether in the public or private sector, and those who qualify will receive health insurance ⁽¹¹⁾. This study aimed to measure the general population's perceptions and acceptance of the new national health insurance program to overcome any implementation obstacles.

Materials and Methods

Study design

The study was a cross-sectional study. The survey questions were taken from earlier research on healthcare professionals, with minor linguistic revisions ⁽¹⁰⁾.

Study setting

The survey was made available on the public pages of Facebook, WhatsApp, and Telegram to be answered by the participants. The recruitment of the participants took place from February to September 2023. The total number of the participants was 562.

Survey domains

The survey included 29 items for seven domains: demographic (5), awareness and need (5), support of the health insurance program (3), perceived benefit to patients (4), perceived benefits to health system (6), perceived challenges (4) and satisfaction with current healthcare systems (2). Five out of seven domains had 5-point Likert scale (scores ranged from 1 to 5 for each item) giving 1 to strongly disagree and 5 to strongly agree. A panel of experts assessed the content validity of the questionnaire, ensuring its relevance and accuracy. Additionally, Cronbach's alpha was calculated to evaluate the internal consistency of the questionnaire, with the results demonstrating good internal validity. Additionally, it was piloted to receive feedback regarding the survey's clarity.

Inclusion and exclusion criteria

The poll was distributed electronically via Google Form for adults over the age of eighteen years old. In this study, we excluded healthcare providers, as they were already included in our previously published research ^(10,11). The focus of this study was to assess the perceptions of the general population.

The subject matter experts verified the survey items' face validity. Arabic was the language of the survey.

Sample size calculation

The sample size was calculated using this equation: $N = \frac{z^2 * p(1-p)}{d^2}$, where $z = 0.95$ confidence level (95%), $p =$ expected prevalence (50%), $d =$ margin of error (5.0). After using sample size calculator and assuming Iraq has 28,000,000 adults, the sample size should be 385. The survey was distributed twice a week until we reached the required sample size.

Ethical approval

The study proposal was reviewed by the Ethical Committee at the University of Baghdad/College of Pharmacy. Approval was obtained before starting the survey distribution (data collection) and the approval number was 1795. The survey was anonymous, and participation was voluntary.

Statistical analyses

Data were analyzed using version 25 of the Statistical Package for the Social Sciences (SPSS). Descriptive statistics—including means, standard deviations, frequencies, and percentages—were calculated for each study item. To identify factors influencing public support for the proposed insurance scheme, multiple linear regression analysis was performed. Independent variables were selected based on univariate analysis, retaining the least non-significant predictors. This process yielded five key domains: satisfaction with the current health system, perceived benefits for patients and the system, financial burden, and perceived challenges. Internal consistency of the

questionnaire was assessed using Cronbach's alpha. A p-value < 0.05 was considered statistically significant

Results and Discussion

Participants' characteristics

A total of 562 individuals participated in the current study, comprising 63.7% women and 36.3% men. Participants ranged in age from 23 to 61 years, with a mean age of 36.24 years. The majority were university students (55.5%, n = 312), followed by

government employees (24.4%, n = 137) and healthcare workers excluding physicians, dentists, and pharmacists (7.7%, n = 43). Most respondents resided in Baghdad (61.2%, n = 344) and Thi-Qar (10.3%, n = 58). Based on self-reported employment status, 37.7% (n = 212) worked in the public sector, 18.0% (n = 102) in the private sector, and 5.7% (n = 32) in both sectors. Table 1 presents the demographic and occupational characteristics of the study participants.

Table 1. The Demographic Characteristic of the Study Participants

Characteristic	Subcategories	Frequency	%
Gender	Female	358	63.7
	Male	204	36.3
Primary work setting	Private sector	102	18
	Public sector	212	37.7
	Both	32	5.7
Profession	Student	312	55.5
	Governmental employee (not HCW)	137	24.4
	Healthcare worker (HCW) ‡	43	7.7
	Housewife	25	4.4
	Self-employed	23	4.1
	Retired	8.0	1.4
	Jobless	14	2.5
Province	Baghdad	344	61.2
	Thi-qar	58	10.3
	Najaf	36	6.4
	Karbalaa	29	5.2
	Dyala	28	5.0
	Other province*	67	10.4
Age (years)	mean= 36.24	Range =22-63	

‡ HCW except physician, dentist and pharmacist

*Other participating provinces included Anbar, Irbil, Basrah, Babil, Kirkuk, Wasit

Participant's awareness and need to health insurance

Approximately half of the participants (54.6%, n = 307) were not aware of the details of the new Iraqi health insurance law before this survey. The majority of the participants were not diagnosed with chronic disease (81%, n = 455). Seventy-three percent didn't think that they needed a high level of

healthcare, and 65.7%, n = 369, believed that they didn't need to see their specialist doctor regularly. In spite of that, the majority of the participants found that paying 1% of their salary per month to health insurance is considered reasonable. Whereas about twenty percent considered this 1% monthly payment to be a high cost, as shown in Table 2.

Table 2. Participant's Awareness and Need to Health Insurance

Awareness and Need items	Yes			No	
I am aware of the details of the new Iraqi health insurance law before this survey	255 (45.4%)			307 (54.6%)	
I am diagnosed with chronic disease	107 (19%)			455 (81%)	
My physician think that I need a high level of healthcare	150 (26.7%)			412 (73.3%)	
I need to see my specialist doctor regularly	193(34.3%)			369 (65.7%)	
Paying 1% of my salary per month to the health insurance is considered	Reasonable 385(68.5%)	Very high cost 61 (10.9%)	High cost 56 (10%)	Low cost cost 30 (5.3%)	Very low cost 30 (5.3%)

The perceptions of the participants toward the health insurance program implementation

Most of the participants (76.7%, n = 431) would support the plan's implementation. In addition, approximately seventy-four percent of the respondents (n = 417) were interested in joining the

health insurance program. Most of the participants (66.6%, n = 374) would support the obligatory enrollment of government employees in the health insurance plan. See Table 3. Cronbach's alpha for these three items was 0.910, which represents very good internal validity.

Table 3. The participant's support of the health insurance program implementation

Support items	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	SD
I am supporting the implementing the new health insurance plan in Iraq	21 (3.7%)	16 (2.8%)	94 (16.7%)	175 (31.1%)	256 (45.6%)	4.02	1.02
I will join the new health insurance program	21 (3.7%)	18 (3.2%)	106 (18.9%)	203 (36.1%)	214 (38.1%)	4.05	0.99
I support the obligatory enrollment of the governmental employees in the health insurance plan	27 (4.8%)	53 (9.4%)	108 (19.2%)	165 (29.4%)	209 (37.2%)	3.85	1.16

A five-point Likert scale was employed, with 1 indicating Strongly Disagree and 5 indicating Strongly Agree

The perception of the participants toward the health insurance program possible impact on them and on the healthcare system

The majority of the participants (75.8%, n = 446) believed that participating in the new health insurance program would enhance access to health services in the private sector, and 82.8% (n = 465) of respondents agreed that the plan would decrease the financial burden on patients during times of illness. The survey responses revealed 76%, n = 429, were ready to pay a percent of their salary to get adequate health service whenever they needed it. Cronbach's alpha for these three items was 0.875, which indicates very good internal validity. Almost 71.2% (n = 400) of the respondents believed that the quality of healthcare services in both the public and private sectors would be enhanced by the plan. The majority of the participants (73.9%, n = 415)

expected that the competition between the two sectors would improve the quality of medical services. Nearly 90% of respondents (n = 498) believed that implementing electronic medical prescriptions would facilitate easier access to medications from any pharmacy within the health insurance network. Approximately 80% (n = 448) anticipated that, if implemented, the insurance plan would lead to increased demand for advanced diagnostic procedures among insured patients. The same proportion also expected the program to promote the adoption of new technologies within the healthcare system. Internal consistency for the six items assessing perceived benefits of the program's impact on the healthcare system was high, with a Cronbach's alpha of 0.911. Further details are presented in Table 4.

Table 4. The Perception of the Participants toward the Health Insurance Program Possible Impact on Them and on the Healthcare System.

Benefit to participants	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	SD
I will participate in the new health insurance program since it can enhance the access to the health services in the private sector	18 (3.2%)	20 (3.6%)	98 (17.4%)	206 (36.7%)	220 (39.1%)	4.05	0.99
I need health insurance to avoid financial hardship in time of illness	11 (2%)	19 (3.4%)	67 (11.9%)	224 (39.9%)	241 (42.9%)	4.18	0.91

Continued 4

I am ready to pay a percent of my salary to get adequate health service whenever I need it	17 (3%)	36 (6.4%)	80 (14.2%)	222 (39.5%)	207 (36.8%)	4.01	1.02
I don't have financial barrier preventing me from visiting health care providers at the private sector	31 (5.5%)	67 (11.9%)	127 (22.6%)	211 (37.5%)	126 (22.4%)	4.35	1.03
Benefit to healthcare system							
The health insurance would enhance the quality of healthcare service in public sectors	24 (4.3%)	41 (7.3%)	97 (17.3%)	212 (37.7%)	188 (33.5%)	3.89	1.08
The health insurance would enhance the quality of healthcare services in the private sector	26 (4.6%)	47 (8.4%)	125 (22.2%)	196 (34.9%)	168 (29.9%)	3.77	1.24
The health insurance will create more competition between the public and private sectors to improve the quality of healthcare services	26 (4.6%)	38 (6.8%)	83 (14.8%)	219 (39%)	196 (34.9%)	3.92	1.08
Providing the electronic medical prescription will make it easier for patients to pick up medications from any pharmacy within the health insurance network	7 (1.2%)	8 (1.4%)	49 (8.7%)	214 (38.1%)	284 (50.5%)	4.35	0.79
Health insurance will lead to the adoption of more new medical technology	9 (1.6%)	15 (2.7%)	90 (16%)	224 (39.9%)	224 (39.9%)	4.13	0.89
Health insurance will increase the demand for more advanced diagnostic procedures.	13 (2.3%)	22 (3.9%)	79 (14.1%)	243 (43.2%)	205 (36.5%)	4.07	0.93

A five-point Likert scale was employed, with 1 indicating Strongly Disagree and 5 indicating Strongly Agree

The Perceptions of the Participants toward the Potential Challenges Facing the New Health Insurance Program Implementation

The majority of participants (67.6%, n = 380) believed that partial coverage of fees through health insurance would lead to an increase in unnecessary visits to private clinics and hospitals. Additionally, they anticipated that implementing health insurance would reduce overcrowding in public sector

facilities relative to the private sector. Approximately two-thirds (n = 333) agreed that requiring co-insurance payments for services (10–25%) could help alleviate congestion in private clinics, and a similar proportion believed it could also reduce overcrowding in public hospitals. Internal consistency for these four items was good, with a Cronbach's alpha of 0.840. Details are presented in Table 5.

Table 5. The Perceptions of the Participants toward the Potential Challenges Facing the New HIP Implementation

Perceived challenges	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	SD
The health insurance pays part of the fees of private clinic and hospitals and this could increase the number of unnecessary visits there.	11 (2%)	53 (9.4%)	118 (21%)	240 (42.7%)	140 (24.9%)	3.62	0.99
Implementing health insurance will reduce the crowdedness in public sector and increase it in the private one	12 (2.1%)	46 (8.2%)	115 (20.5%)	249 (44.3%)	140 (24.9%)	3.81	0.97
Patients paying co-insurance for services (10-25%) may lead to reduce crowdedness in the private clinics	14 (2.5%)	65(11.6%)	150 (26.7%)	226 (40.2%)	107 (19%)	3.77	0.95
Patients paying co-insurance for services (10-25%) may lead to reduce crowdedness in the public hospitals	15 (2.7%)	42 (7.5%)	117 (20.8%)	268 (47.4%)	120 (21.4%)	3.61	0.99

A five-point Likert scale was employed, with 1 indicating Strongly Disagree and 5 indicating Strongly Agree

Satisfaction of the Participants with the Current Healthcare System

Approximately 43% (n = 241) of the participants were unsatisfied with the current health services in the private sector compared to the cost

they pay as shown in Table 6. On the other hand, 57.3%, n = 322, were unsatisfied with the level of current health services in the public sector compared to being semi-free.

Table 6. Satisfaction of the Participants with the Current Healthcare System

Satisfaction with current health system	Very satisfied	Satisfied	Neutral	Unsatisfied	Very unsatisfied	Mean	SD
How satisfied are you with current health services in the private sector compared to the cost you pay?	21 (3.7%)	136 (24.2%)	162 (28.8%)	167 (29.7%)	74 (13.2%)	2.701	1.03
How satisfied are you with the level of current health services in the public sector compared to it being semi-free	20 (3.6%)	92 (16.4%)	126 (22.4%)	182 (32.4%)	140 (24.9%)	2.31	1.04

Regression analysis

According to the multiple linear regression analysis, there was a significant positive association between supporting the new IHIP and three variables: the benefits of the new program to the

healthcare system, the benefits of the new program to the insured people, and having no financial problem visiting the private sector.

Table 7. Multiple Linear Regression of Factors Influencing the General Population Support to the IHIP

Model independent variables	Standardized Coefficients (β)	P-value
Age	0.032	0.157
Satisfaction of general population with the current healthcare system	0.025	0.267
The benefits of the new program to healthcare system	0.210	0.0001*
The benefits of the new program to healthcare users	0.668	0.0001*
Having no financial problem to visit the private sector	0.057	0.017*
The challenges that may face the new program implementation	0.007	0.807

*Significant (P-value less than 0.05) according to the multiple linear regression analysis. Dependent Variable: I am supporter of the new Iraqi health insurance plan. R-square = 0.740

While the majority of the participants in this study expressed their support and readiness to register into the IHIP to enhance healthcare accessibility, they highlighted the necessity for increased advertising to fully understand its details. The primary objectives of the IHIP include enhancing accessibility to healthcare in the public and private sectors and improving service quality. Additionally, the program seeks to alleviate the financial strain associated with medical treatment⁽¹²⁾.

In this study, the majority of the participant were not diagnosed with chronic disease and large percent of them did not believe that they need high level of healthcare. This is because about more than half of the study participants were young adults. In spite of that, a large percent of them were ready to pay monthly payment to be insured. Similar results were found in a systematic review published in 2016 to determine perceptions about health insurance among young adults aged 18 – 24 years. Numerous young adults believe they are immune to numerous health issues and are in good health, but a significant portion of them may be endangering their long-term health by following unhealthy lifestyles that increase their chance of developing diseases in the future⁽¹³⁾.

Although the Health Insurance Law was approved in 2021, more than half of the participants were not aware about its details before this survey. This may be due to the lack of advertising campaigns to increase their awareness. Similar results were found in a study conducted in Nijeria in which only two-fifths of the total study participants claimed to have ever heard of the National Health Insurance⁽¹⁴⁾.

About two-thirds of respondents believed that joining the new health insurance program would

improve access to healthcare services in the private sector. Financial support encourages individuals to seek timely medical care rather than delay or avoid treatment due to cost concerns. It also promotes the use of a wider range of services—including preventive care, screenings, routine check-ups, and follow-up visits—which helps with early detection of health issues, better management of chronic conditions, and overall improvement in well-being. This aligns with several studies indicating that the NHI program has effectively enhanced equal access to healthcare services^(15, 16).

Vast majority of the respondents agreed that the new health insurance plan would decrease the financial burden on patients during times of illness since the healthcare services in the private sector would be subsidized by the new insurance program. Several studies have found an association between financial hardship, especially behavioral hardship or avoidance of care, and absence of health insurance/coverage⁽¹⁷⁻¹⁹⁾.

About two-thirds of the participants were willing to contribute a portion of their salary to health insurance in order to receive adequate healthcare when needed. In contrast, one-third—accustomed to receiving semi-free services from the public sector—were reluctant to accept the idea of paying for medical care. This finding contrasts with results from a study conducted in Ethiopia, which assessed the willingness to pay for health insurance among public civil servants. The Ethiopian study revealed that employees demonstrated reluctance to participate in health insurance schemes for several reasons, including limited income, preference for out-of-pocket payments, distrust in the efficacy of health insurance, and perception of insufficiently skilled healthcare providers⁽²⁰⁾.

Almost two-thirds of the respondents believed that the quality of healthcare service in both the public and the private sector would be enhanced by the health insurance plan. The competition created by the new program can enhance the quality in both sectors. This was comparable to the results of a qualitative Iraqi study that measured the perception of experienced pharmacists regarding the Iraqi health insurance program. Most pharmacists believed that the health insurance can enhance the quality of medical services in both the public and private sectors because there would be more competition among health care providers ⁽¹⁰⁾.

The majority of participants agreed that health insurance could support the adoption of new medical technologies and advanced diagnostic procedures. The use of electronic medical prescriptions would make it easier for patients to obtain medications from any pharmacy within the insurance network. Transitioning from paper-based to electronic systems is essential, as it reduces administrative burden and allows healthcare providers to focus more on patient care—resulting in shorter wait times and more efficient service delivery. A review article from the Kingdom of Saudi Arabia highlighted that electronic systems help healthcare professionals identify drug interactions and detect abnormal laboratory results more effectively ⁽²¹⁾.

Approximately three-quarters of participants believed that implementing a health insurance program would reduce overcrowding in the public sector while increasing patient volume in the private sector. This perception may stem from the belief that private healthcare services offer higher quality care and that insurance coverage would offset most of the associated costs. A similar observation was reported in a qualitative Iraqi study exploring physicians' perspectives on the potential impact of introducing the IHIP. Many physicians anticipated that insured individuals would shift from public to private healthcare services, driven by expectations of better service quality and shorter waiting times in the private sector ⁽¹¹⁾.

The vast majority of the respondent believed that the number of unnecessary visits to private clinics and hospitals would increase since the health insurance pays most of the fees. A study conducted in Saudi Arabia revealed that health insurance led to health-seeking behavior ⁽²²⁾. About two third of the participants in this study agreed that paying co-insurance for services may lead to reduce crowdedness in the public sector and in the private clinics. Similarly, the same previous qualitative study indicated that some physicians believed that the workload will increase in the private sector due to financial support by the health insurance. Other physicians mentioned that the workload will reduce in the public and private sectors because of co-insurance paid by patients to HCPs at each visit

⁽²⁰⁾. Likewise, a study in Austria found that high co-payment led to fewer physician visits among patients with chronic diseases and limited income ⁽²³⁾.

More than forty percent of the respondents were unsatisfied with the current health services in the private sector compared to the cost since the payment in the private sector are totally out of pocket. On the other hand, almost two third of them were unsatisfied with the level of current health services in the public sector despite being almost free of charge because of the long waiting list and low accessibility of treatment. Comparable results were found in an Iraqi study aimed to elicit the viewpoints of the Iraqi people on the current health system. More than two thirds of them had negative perspective when the current health services compared to the past in terms of accessibility, availability of resources, and quality of care ⁽²⁴⁾. The main factors associated with public support for the new health insurance plan were its perceived benefits to the healthcare system and its ability to reduce financial barriers to accessing private sector services. Previous studies have identified several elements that influence individuals' decisions to participate in health insurance programs, including perceived need for healthcare, employment status, overall health condition, level of education, health literacy, and trust in healthcare providers and insurance institutions ^(25,26).

This study has several limitations. First, more than half of the participants were young adults, primarily due to challenges in reaching older individuals through social media platforms. Second, the use of a convenience sampling method may limit the generalizability of the findings beyond the surveyed group. Additionally, the study may not be representative of all Iraqi provinces, as the sample did not include proportional participation from each region. The survey was administered electronically and targeted individuals who were literate and had access to social media; therefore, illiterate individuals and those without internet access were excluded from participation.

Conclusion

The general population demonstrated a positive perception of the proposed health insurance plan, particularly in terms of its potential to improve the quality and accessibility of healthcare services. Low satisfaction with existing health services, coupled with the perceived affordability of the new plan, may motivate individuals to enroll. However, awareness of the plan's details was found to be insufficient. Therefore, targeted public awareness campaigns are essential to enhance understanding and engagement with the health insurance program. The study's results can help health officials respond to public concerns, improve how the plan is introduced, and consider flexible payment options

and shared costs to make services fair and reduce pressure on hospitals and clinics.

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Conflicts of Interest

The authors have no conflict of interests.

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Ethics Statements

It was approved by the Ethical Committee of the College of Pharmacy/University of Baghdad before the start of the study.

Author Contribution

The authors confirm contribution to the paper as follows: AAA, and BS conducted study conception, design, analysis and interpretation of results; SK, and EK conducted data collection, results arrangement, drafting manuscript, NH, MA and WD participated in data collection, study design. All authors reviewed the results and approved the final version of the manuscript.

References

1. Alwan AA. Health situation in Iraq: challenges and priorities for action. Baghdad: Ministry of Health; 2019.
2. Health Sector Overview – National Investment Commission [Internet]. Available from: <https://investpromo.gov.iq/sectors/health-sector/health-sector-overview/>
3. Annual statistics report 2019. Baghdad: Directorate of Planning and Resources Development, Ministry of Health; 2020 [Internet]. Available from: <https://moh.gov.iq/upload/upfile/ar/1349.pdf>
4. out-of-pocket expenditure (% of current health expenditure [Internet]. 2021. Available from: <https://data.worldbank.org/indicator/SH.XPD.OPC.CH.ZS?end=2018&locations=TR&start=201>
5. World Health Organization Universal Health Coverage. (2022). Available online at: https://www.who.int/health-topics/universal-health-coverage#tab=tab_1.
6. Population, total - Iraq | Data [Internet]. Available from: <https://data.worldbank.org/indicator/SP.POP.TOTL?Locations=IQ>
7. Central Statistical Organization-Iraq Population Estimates 2020. Available from: <https://mop.gov.iq/en/central-statistical-organization>.
8. Rahman R, Alsharqi OZ. What drove the health system reforms in the Kingdom of Saudi Arabia? An analysis. *Int J Health Plann Manage*. 2019;34(1):100–10.
9. Asmri M Al, Almalki MJ, Fitzgerald G, Clark M. The public health care system and primary care services in Saudi Arabia: a system in transition. *East Mediterr Heal J*. 2020;26(4):468–76.
10. Al-Jumaili AA, Sameer HN. The Insights of Experienced Pharmacists Regarding the Iraqi health Insurance Program: A Qualitative Study (Conference Paper). *Iraqi J Pharm Sci (P-ISSN 1683-3597 E-ISSN 2521-3512)*. 2022;31(Suppl.):131–40.
11. Sameer HN, Al-Jumaili AA. The Expected Impact of the New Iraqi Health Insurance Program and the Challenges Facing its Implementation: Physicians' Perspective. *Journal of the Faculty of Medicine Baghdad*. 2023 Apr 27;65(1):34–44.
12. Iraq Health Coverage Law . 2020.
13. Yang L. Young adults' attitudes and perceptions on health insurance and their health insurance literacy levels [master's thesis]. Mankato (MN): Minnesota State University; 2016. Available from: <https://cornerstone.lib.mnsu.edu/etds/617/>
14. Adewole DA, Akanbi SA, Osungbade KO, Bello S. Expanding health insurance scheme in the informal sector in Nigeria: awareness as a potential demand-side tool. *The Pan African Medical Journal*. 2017;27:52.
15. Trisnantoro L, Marthias T, Djasri H, Chandra, Hasri ET, Kurniawan MF, et al. Laporan hasil penelitian evaluasi kebijakan JKN di 13 provinsi Indonesia [Internet]. Yogyakarta: Pusat Kebijakan dan Manajemen Kesehatan, Fakultas Kedokteran, Kesehatan Masyarakat dan Keperawatan, Universitas Gadjah Mada; 2020. <https://chpm.fk.ugm.ac.id/laporan-hasil-penelitian-evaluasi-kebijakan-jkn-di-13-provinsi-indonesia-2019-2020/>.
16. Susanti Y, Siddiq TB, Irasanti SN, Perdana R, Heriady Y. Stakeholder Perception towards the Implementation of National Health Insurance Program. *Global Medical and Health Communication*. 2021 Aug 29;9(2):116–25.
17. Zhao J, Han X, Zheng Z, Banegas MP, Ekwueme DU, Yabroff KR. Is health insurance literacy associated with financial hardship among cancer survivors? findings from a national sample in the United States. *J Natl Cancer Inst Cancer Spectr*. 2019;3(4):pkz061.
18. Williams CP, Pisu M, Azuero A, et al.. Health insurance literacy and financial hardship in women living with metastatic breast cancer. *JCO Oncol Pract*. 2020;16(6):e529–e537.
19. Al-Jumaili AA, Ahmed KK, Koch D. Barriers to healthcare access for Arabic-speaking population in an English-speaking country. *Pharmacy Practice (Granada)*. 2020 Jun;18(2):1809.
20. Amilaku EM, Fentaye FW, Mekonen AM, Bayked EM. Willingness to pay for social health insurance among public civil servants: A cross-

- sectional study in Dessie City Administration, North-East Ethiopia. *Frontiers in Public Health*. 2022 Jul 19;10:920502.
21. AlSadrah SA. Electronic medical records and health care promotion in Saudi Arabia. *Saudi Med J*. 2020;41(6):538–89.
22. Al-Hanawi MK, Mwale ML, Kamninga TM. The effects of health insurance on health-seeking behaviour: evidence from the Kingdom of Saudi Arabia. *Risk Management and Healthcare Policy*. 2020 Jun 18:595–607.
23. Hafner P, Mahlich JC. Determinants of physician's office visits and potential effects of co-payments: evidence from Austria. *Int J Health Plann Manage*. 2016 Jul;31(3):e192–203.
24. Jadoo SA, Alhusseiny AH, Yaseen SM, Al-Samarrai MA, Mahmood AS. Evaluation of health system in Iraq from people's point of view: a comparative study of two different eras. *Journal of Ideas in Health*. 2021 May 20;4(2):380–8.
25. Courtemanche C, Marton J, Ukert B, Yelowitz A, Zapata D. Early effects of the Affordable Care Act on health care access, risky health behaviors, and self-assessed health. *Southern Economic Journal*. 2018 Jan;84(3):660–91.
26. Singh KA, Wilk AS. Affordable Care Act Medicaid Expansion and Racial and Ethnic Disparities in Access to Primary Care. *J Health Care Poor Underserved*. 2019;30(4):1543–1559.

تصورات وتقبل عامة السكان تجاه برنامج الضمان الصحي في العراق

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الخلاصة

هدفت هذه الدراسة إلى قياس تصورات عامة السكان وقبولهم لبرنامج التأمين الصحي الوطني الجديد للتغلب على أي معوقات في التنفيذ. تم إجراؤها كدراسة مقطعية، واستخدمت استطلاعاً إلكترونياً عبر نماذج Google، تم توزيعها على منصات التواصل الاجتماعي. تم التوظيف من فبراير إلى سبتمبر ٢٠٢٣، مما أدى إلى ٥٦٢ مسحا مكتملاً. وكانت غالبية المجيبين من الإناث (٦٣,٧٪). أكثر من نصفهم من طلاب الجامعات (٥٥,٥٪) و ٢٤,٤٪ من موظفي الحكومة. أكثر من النصف (٥٤,٦٪) لم يكونوا على دراية بتفاصيل خطة التأمين الصحي. على الرغم من ذلك، أيد ٧٦,٧٪ وكانوا على استعداد للانضمام إلى خطة التأمين الجديدة. وجد معظمهم (٦٨,٥٪) أن المساهمة الشهرية بنسبة ١٪ من رواتبهم معقولة. يعتقد حوالي ٧١,٢٪ أن التأمين الصحي سيحسن جودة خدمات القطاع العام ويخلق منافسة مع القطاع الخاص. والجدير بالذكر أن ٤٢٪ كانوا غير راضين عن الخدمات الصحية الخاصة مقارنة بتكلفتها، و ٥٦٪ كانوا غير راضين عن خدمات الصحة العامة شبه المجانية الحالية. بشكل عام، هناك تصور إيجابي لخطة التأمين الصحي الجديدة، لا سيما في تحسين الجودة. من المرجح أن يشجع الرضا المنخفض عن الخدمات الحالية والقدرة على تحمل تكاليف الخطة الجديدة الناس على الانضمام. هناك حاجة إلى زيادة الحملات الإعلانية لزيادة الوعي بتفاصيل برنامج التأمين الصحي. يمكن أن تساعد نتائج الدراسة مسؤولي الصحة في برنامج التأمين الصحي في معالجة المخاوف العامة والتخفيف من حداثها.

الكلمات المفتاحية: الوعي، التقبل، التحديات، عامة السكان، قانون التأمين الصحي العراقي.