

Impact of Health Insurance on Cancer Treatment Patients - Survey of Cancer Patients in Ho Chi Minh City

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Abstract:

Cancer not only affects human health but also causes a significant financial burden due to high and long-term treatment costs. In recent years, particularly in Ho Chi Minh City, cancer tends to develop quickly and is often only detected in the late stages. At this time, medical insurance contributes greatly to the decrease in financial burdens of patients and their families; therefore, have a positive impact on patients' mental state during treatment. The studies' results in Ho Chi Minh City reveal that health insurance payment is supportive, risk-sharing, and aimed at reducing the burden on patients and their families, rather than being a major proportion of the total costs incurred by patients and families. However, healthcare insurance could have a considerable influence on reducing fear and anxiety (90.3%); alleviating the stress of patients and their families (79.6%); and strengthening the faith in overcoming illness (44.7%). Medicine 2024, the article proposes 5 groups of solutions to enhance the positive effects of valuable anti-cancer drugs.

Keywords: Impact Factor, Health Insurance, Cancer, Patients, Ho Chi Minh City

1. Introduction:

Health insurance is a public health financing mechanism in the field of health care and at the same time a social security policy, for the goals of fairness, efficiency, and development. Health insurance is considered the primary method to achieve the goal of universal health care coverage.

Cancer is a general term for a large group of diseases characterized by the growth of abnormal cells beyond their normal boundaries, which can then invade adjacent parts of the body and /or spread to other organs (WHO, 2018).

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In the world, in 2012 there were 14 million new cancer cases and 8.2 million deaths of cancer patients. By 2020, it is estimated that there will be about 19.3 million new cases and 9.9 million deaths caused by cancer (IARC, 2020). According to World Health Organization forecasts, global cancer cases are expected to increase by more than 75% by 2050, with more than 35 million new cancer cases, which rise by 77% compared to 2022 (IARC, 2020). In Vietnam, cancer data also increases every year. According to GLOBOCAN, (2022), every year, about 180,480 people get

cancer, about 10,184 people die, and currently, more than 409,144 patients living with this disease. For every 100,000 people, there are 159 people newly diagnosed with cancer and 106 people dying from this illness. The most common cancers in men are liver, lung, stomach, colorectal, and prostate cancer. The most common cancers in women include breast, lung, colorectal, stomach, and liver cancers. (Ministry of Health, 2022.).

The application of advances and progressive technology in cancer diagnosis and treatment with new regimens in surgery, chemotherapy, radiotherapy or targeted therapy, and immunotherapy opens up many opportunities for patients. However, high medical costs are financial burdens for patients and their families (Son., P.N., et al, 2022). Cancer not only affects the patient's health but also leaves a significant financial burden due to expensive and long-term treatment costs. At this time, the health insurance card is considered a "talisman" for patients as it provides effective support, shares the burden of costs, and helps them feel confident in the long-term treatment process. In recent years, in Ho Chi Minh City, cancer has tended to develop rapidly with increasing numbers. Most patients are only diagnosed when it has been late and metastasized. With cancer and fatal diseases, treatment at most specialized hospitals is exorbitant due to costs such as medical supplies, tools, and drugs. If a patient does not have health insurance, he or she will have difficulty paying medical and non-medical expenses, leading to negative effects on mental health. This article focuses on researching the impact of health insurance on cancer treatment patients according to the following contents: (i) Financial impact, (ii) Psychological impact. The authors conducted a survey according to a pre-designed questionnaire, the respondents were patients/relatives undergoing cancer treatment in Ho Chi Minh City.

2. Research methods:

Data collection methods:

The authors used the document research method to systematize the theoretical basis of health insurance; health insurance benefits of cancer patients, classification of cancer patients, and

characteristics of cancer patients' medical examination and treatment needs. This article reviews theories and studies on health insurance, and the impact of health insurance on patients in general and cancer patients in particular. Relevant studies were selected by the authors from databases such as Scopus, ILO's online library on health insurance, WHO documents, and specialized journals on cancer. The main observations are analyzed thematically and analyzed through a synthetic, narrative method.

To study the impact of health insurance on cancer treatment patients in Ho Chi Minh City, the research team focused on reviewing the following contents: (i) reviewing current legal documents on health insurance and health insurance benefits for cancer patients; (ii) Current situation of cancer and medical expenses of cancer treatment, (iii) Impact of health insurance on cancer patients according to two criteria: financial impact and psychological impact. The questionnaire at the Google form link <https://forms.gle/wxKbFDgDM1cx98Yb9> is designed based on the two aforementioned influencing criteria.

In addition, the authors conducted in-depth interviews with 5 patients and 3 doctors working at a hospital in Ho Chi Minh City. Based on the results of this survey, the authors analyze the achieved results and draw out the remaining limitations and causes. Furthermore, secondary data sources to assess the current situation are collected from books, domestic and foreign scientific journals, and aggregated data from the Ministry of Finance; as well as Ho Chi Minh City Social Insurance. From the collected data, the authors compiled and selected information relevant to the research content and used a combination of descriptive statistics and meta-analysis methods to clarify the current state.

Data processing method:

Collected data is compiled, calculated, and reflected in tables. From there, the research team evaluated and analyzed the data using comparative and analytical methods. The evaluation criteria in the survey are scored using a Likert scale with 5

levels from 1 to 5 (in which level 1 corresponds to the lowest rating, level 5 corresponds to the highest rating). Specifically:

- Level 1: Strongly disagree; Corresponding points: 1 point
- Level 2: Disagree; Corresponding points: 2 points

- Level 3: Being hesitant; Corresponding points: 3 points
- Level 4: Agree; Corresponding points: 4 points
- Level 5: Completely agree; Corresponding points: 5 points

The impact assessment levels corresponding to the scores are as follows:

Level	1	2	3	4	5
Scores	1 - 1,8	1,81 - 2,6	2,61 - 3,4	3,41 - 4,2	4,21 – 5

3. Theoretical basis:

3.1. Legal regulations on health insurance benefits for cancer patients:

Health Insurance Law No. 25/2008/QH12 is the basic and complete legal basis to realize the goal of universal health insurance in particular and social security in general. This Law is amended and supplemented by Law No. 46/2014/QH13 effective on January 1, 2015. In which, it is stipulated:

- Health insurance is a form of compulsory insurance implemented by the Government, applied to subjects prescribed by this Law to care for the health of health insurance participants, not for profit purposes.
- Initial health insurance medical examination and treatment facility is the medical examination and treatment facility where health insurance participants register to set up records, manage health, and receive medical examination and treatment covered by health insurance. Medical care according to needs following the coverage of health insurance; is the basis for determining that health insurance participants can take medical examination and treatment covered by health insurance, transfer medical examination and treatment facilities under health insurance at the correct level of technical expertise, and determine the scope of insurance benefits. patient's medical insurance.

Health insurance benefits of cancer patients (who participate in health insurance) are as follows:

- (i) Go to the right hospital level according to the regulations

The Health Insurance Fund pays 80-100% of the costs depending on the participants. Particularly for patients with health insurance benefits of 95% or 80%, 100% will be paid by the Health Insurance Fund (within the scope of benefits) if they meet the 2 following conditions simultaneously :

- Participate in health insurance continuously for 5 years or more.
- The total amount of money co-paid for medical examination and treatment within the designated healthcare network in a year exceeds 6 times the base salary at the time of the medical examination and treatment.

When the above conditions are met, cancer patients will not have to pay the co-pay portion (5% or 20%) of medical examination and treatment costs covered by health insurance in that year right at the medical examination and treatment facility. The medical examination and treatment facility will be responsible for providing a receipt for the amount of money that covers 6 months of base salary so that the patient has a ground to request the social insurance agency to issue a Certificate of exemption from paying the medical examination and treatment costs covered by health insurance in that year.

- (ii) Going for medical examination and treatment at the wrong level.

In case a patient goes for self-examination or cancer treatment at the wrong level, or escalates to the central level, the patient will only be paid 40% of inpatient treatment costs within the scope of benefits and benefits specified on the card. Health insurance does not pay for outpatient medical examinations and treatment. In the case of health insurance participants with a benefit level of 80%, the health insurance fund will pay 40% of 80% of inpatient treatment costs (equivalent to 32% of medical examination and treatment costs covered by health insurance).

3.2. Overview of research on the impact of health insurance on cancer patients:

(i) Research on the current situation of cancer in Vietnam

Cancer is a large group of diseases that can begin in almost any organ or tissue of the body when abnormal cells grow uncontrollably beyond their normal limits to invade nearby parts of the body and/or spread to other organs. The second process is called metastasis and is the main cause of death from cancer (WHO, 2018). In reality, there are more than a hundred types of cancer and each type has a different prevention, protection, and treatment regimen. Among them, according to Globocan, (2020), there are 5 most common types of cancer in Vietnam namely liver cancer accounts for the highest rate (14.5%), followed by lung cancer (14.4%), breast cancer (11.8%), stomach cancer (9.8%), and colorectal cancer (9%). In addition to general cancer research such as Chau, T. Dat, & Le, T. V. (2023) at Ca Mau General Hospital; most studies focus on a specific type of cancer, such as the research of Huynh, T. T. G., et al, (2023), Thuy., T.T.N, Ha. N.V., (2014) on breast cancer; and Research by Binh, T. D. et al, (2021), LoanN. T., et al (2023) on liver cancer,

In the group of non-communicable diseases, cancer ranks second as the leading cause of death, greater than all other causes of death combined (Ministry of Health, 2023). Mortality statistics during this period also clearly show that the burden of disease due to non-communicable diseases makes up the

highest proportion, accounting for 2/3 of the causes of acquired diseases but accounting for 4/5.

To evaluate the different levels of impact on cancer patients according to the stage of the disease, the authors approach according to the spread of the disease, from early to late stages.

- Early stage: This is the stage when the cancer is just starting to develop and has not spread out of its original location. During this stage, cancer could be treated better because it has not spread to surrounding organs and tissues.

- Stage II-III: At this stage, the cancer has begun to spread further compared to the early stages. It may affect nearby organs or parts of the body. Treatment at this stage may require a more complex regimen than in the early stages.

Stage IV: The final stage usually indicates that the cancer has spread to distant parts of the body, such as internal organs or other parts. This stage is often the most difficult to treat and may require treatments such as chemotherapy, surgery, or stem cell therapy.

Dividing cancer into three stages helps doctors and therapists determine the severity of the disease and choose the most effective treatment. The higher the stage of the disease, the greater the treatment costs and the psychological impact on the patient. Chau, T. Dat, & Le, T. V. (2023).

(ii) Research on cancer treatment costs

According to cancer.net, the 5 factors that make up the cost of cancer treatment are type of cancer, duration of treatment, location of treatment, available health insurance along additional health insurance. For example, the expected cost of medication Men, is based on insurance coverage. Caner.net also highlights the "hidden costs" of cancer treatment. More specifically, daily living expenses might increase as the duration of illness and treatment is prolonged; which causes the loss of income due to interruption of patients' work time and their caregivers during treatment.

The issue of treatment costs is also reflected in research on the quality of life (QoL) of cancer

patients. According to research by Anne Shrestha, et al, (2019), due to the burden of medical and non-medical costs during cancer treatment, patients often accept a basic quality of life and lower their expectations for the future in exchange for more time to live. (LoL). Research in Vietnam by Loan N. T., et al (2023) for patients with hepatocellular carcinoma showed that patients with hepatocellular carcinoma have poorer quality of life. Older age, singleness, low education level, economic difficulties, longer illness and treatment duration, more severe illness, and the presence of underlying diseases lower the patient's quality of life. These factors all incur costs for patients and families.

Data from a national survey on the burden of disease in Vietnam reveals that 74.3% of the disease burden is due to non-communicable diseases, of which cancer is one of the 10 top causes of disease burden every year. (Ministry of Health, 2015). The total direct burden of 6 types of cancer (breast, cervical, liver, colorectal, stomach, oral cavity) is estimated to account for 0.22% of Vietnam's total GDP in 2012... For people with cancer, to increase the chance of survival and treatment, the disease needs to be detected and diagnosed early, and suitable treatment methods should be selected for each stage. However, treatment costs also place a significant financial burden on both patients and families. According to statistics in 2023, the cost of treatment for 6 common cancer groups (breast, lung, liver, colon, stomach, prostate) from the health insurance fund is 6,186 billion VND (Ministry of Health, 2024).

(ii) Research on the impact of health insurance on cancer patients in Vietnam

People with cancer have to cope with mounting difficulties, especially those without health insurance cards (Ministry of Health, 2023). Participating in health insurance has many benefits, including protecting yourself and your family from unwanted risks, helping to enhance treatment effectiveness, and reducing the financial burden on patients. Health insurance embodies the spirit of sharing, reflecting a deep sense of humanity.

Participating in health insurance is a form of "Contributing while healthy, having a reserve when sick.". Participating in health insurance not only protects the health of yourself and your family but is also a way to share your responsibility with the community and society.

Research results by Lien et al., (2023) show the main problems that the majority (over 50%) of patients encounter; where physical health problems are pain, lack of strength, and fatigue; psychological problems are sadness and anxiety; and financial problem is lack of money to treat the disease. Research by Thuong., N. T. T., (2023) on the impact of health insurance on health service use by people in the Northern midlands and mountainous areas using data from the Household Living Standards Survey in Vietnam in 2020. A trend score comparison method applied to a sample of 6860 individuals showed that health insurance has had an impact on: : (i) increasing the frequency of using outpatient medical examination and treatment services among participating people of any type of health insurance; (ii) increasing the frequency of using inpatient medical examination and treatment services; (iii) increasing the probability of using medical services at public health facilities in the region. Cancer is a life-threatening disease that requires long-term treatment at a considerable cost, putting great pressure on both patients and their families. The burden of cancer continues to increase, placing enormous physical, mental, and financial strain on individuals, families, communities, and health systems (WHO, 2018).

3.3. Research direction of the article:

From the research overview, the article approaches the impact of health insurance on cancer treatment patients by focusing on two main impact groups as follows:

(1) Financial impact:

The distinctive features of cancer treatment are multi-modality combination, combining surgery; radiotherapy and chemotherapy; endocrine therapy, and other targeted treatment methods. To

meet the requirement to cover medical expenses, the out-of-pocket medical expenditure (Oop) is calculated as the sum of direct medical expenses and direct non-medical expenses borne by the patients and their families. In there:

- Direct medical expenses are the self-paid hospital fees paid by the patient and household in the most recent year of treatment, apart from the health insurance payment, including the cost of bed days, drugs, and consumables. , surgeries, procedures, and services as required (arising during the patient's inpatient treatment payment).

- Non-medical direct costs are costs incurred outside of hospital fees during the patient's year of treatment, including travel costs, accommodation costs, medicine/functional foods (not included in direct costs for medical supplies), gifts for healthcare personnel, and other expenses incurred when treating and caring for patients.

These regimens are expensive; hence, health insurance is considered a lifesaver, sharing the financial and psychological burdens so patients can feel secure in treatment (Vietnam Communist Party electronic newspaper, 2020). The impact of health insurance on cancer patients depends on whether the patient receives treatment at the right or wrong level, along with the level and condition of the disease. Therefore, the patient and family's expenses are divided into the portion paid by health insurance and the portion paid for out-of-pocket medical expenses (Oop). Compared with current legal regulations on health insurance benefits in Vietnam, the costs reduced thanks to health insurance for cancer patients include:

- Direct expenses (medical expenses)
- + Access to examination and cancer detection: imaging tests such as X-rays, blood and urine tests.
- + Access to surgery and cancer treatment: including costs of radiotherapy, chemotherapy infusion, and endocrine treatment
- + Access to the cost of cancer treatment drugs and side effect control drugs: a number of certain drugs are covered by health insurance at a rate of approximately 20-30%, 50%, or 60%, in which

patients need to co-pay the expenses. In terms of some chemical drugs, social insurance regulates the payment rate.

- Non-direct expenses (non-medical expenses)
- + Eating fee
- + Travel and transportation expenses
 - + Drug/nutraceuticals costs (not included in direct medical costs),
 - + Hospital bed costs when patients are treated as inpatients.
 - + Other expenses incurred when treating and caring for patients, unofficial expenses (gifts for medical staff)

(2) *Psychological impact*

According to the National Cancer Institute, (2023), cancer not only affects physical health but can also bring about various new emotions or intensify existing emotions. These feelings may change depending on period and condition. It can be overwhelming (feeling like life is out of control), fear and anxiety, stress, anticipation, anger, sadness and depression, loneliness, guilt, and gratitude. Among those emotions, some are directly related to whether patients can pay for medical examinations and treatment. According to National Cancer Institute, (2023), psychological impacts will include two psychological dimensions:

Negative direction: Fear, anxiety, and stress about:

- Will there be enough finances to cover the treatment bill?
- Will insurance cover tests, treatment, surgery, and medication costs?
- Will there be enough out-of-pocket expenses in addition to health insurance coverage?

Positive direction:

- Hope that insurance benefits can reduce the financial burden of disease treatment and be more grateful when receiving medical payments.
- Thanks to health insurance, patients can receive early treatment without delay: "Will not having

health insurance cause patients to delay treatment?”

4. Research Findings:

In Ho Chi Minh City, Health insurance reached 8,720,272 people (an increase of 2.01% compared to 2022). The health insurance coverage reached 92.25% of the city's population (Social Insurance of Ho Chi Minh City, 2024). This figure illustrates that citizens recognize the importance of participating in health insurance and maintain continuous enrollment for at least 5 years to ensure maximum healthcare benefits. In 2023, the Social Insurance of Ho Chi Minh City allocated 22,805 billion VND for health insurance, an increase of 14.15% compared to 2022. The number of medical consultations and treatments in the city in 2023 increased compared to the same period in 2022. Specifically, at 187 health facilities there were 20.59 million cases of medical consultations and treatments covered by health insurance, an increase of 18.76% compared to the same period in the previous year (Social Insurance of Ho Chi Minh City, 2024).

In Vietnam, the average cost of treating a cancer patient is around 176 million VND per year, with health insurance covering about 51.87 million

VND, equivalent to 29.3% of the treatment expenses (Ministry of Health Portal, 2023). Consequently, a significant portion of the healthcare costs is shouldered by patients themselves. According to the Ministry of Health's report on the Health Insurance Law revisions alongside the Draft Proposal for amendments to the 2024 Health Insurance Law, it is currently observed that households in Vietnam bear approximately 45% of healthcare expenses directly. The coverage level of health insurance is the main influence on the amount of direct expenses incurred by households.

To assess the impact of health insurance on cancer patients in Ho Chi Minh City, our research team conducted a survey on cancer patients undergoing treatment at several hospitals in the city. Due to referral, the number of patients receiving medical examination and treatment in Ho Chi Minh City includes individuals from other localities. In 2023, residents from four provinces in the Mekong Delta, namely Long An, Tien Giang, An Giang, and Dong Thap, had the highest number of cancer consultations and hospitalizations in 2023 (Ho Chi Minh City Oncology Hospital, 2024). Therefore, the patients mentioned in this article are not limited to local residents.

Table 1: Characteristics of cancer patients surveyees in Ho Chi Minh City

	Rate (%)
1. By age group	
- Below 30 years old	12.4%
- From 30 to 40 years old	18.1%
- From 40 to below 50 years old	26.7%
- From 50 to below 60 years old	11.4%
- Above 60 years old	31.4%
2. By gender	
- Males	58%
- Females	41%
- Not willing to state	0%
3. By disease stage	
- Early stage	24.8%
- Stages II-III	36.2%
- Stage IV	39%

Source: Survey conducted by the research team

Of note, the majority of cases fall into Stages II-III and Stage IV of the disease. These stages signify cancer that has progressed deeper into nearby tissues (Stages II-III) or has spread to other organs or parts of the body (Stage IV). Consequently, treatment becomes more challenging and requires higher costs.

(i) Financial Impact:

The financial impact refers to the total expenses borne by the patient, including both medical and non-medical costs. According to a study by Anh, N. Đắc Q., et al. (2024), direct healthcare costs accounted for 35.38%, while direct non-healthcare costs comprised 64.62% of the total expenses. On average direct healthcare costs, including

hospitalization, medication, consumables, surgery, and other medical procedures paid by patients (excluding what health insurance covers), accounted for 60.2% of the total costs. Treatment duration, treatment methods, and the amount reimbursed by health insurance were identified by the payer as important factors related to cancer treatment costs.

Based on the assessment of patients and their families who benefit from health insurance regarding the impact of health insurance on direct expenses and the Likert scale categorization as presented in the research methodology, the results of the financial impact on direct expenses are as follows:

Table 2: Survey Results on Financial Impact

Financial Impact	Average score
(1) For healthcare expenses	
Thanks to health insurance, I/my family members have accessed cancer screening and diagnosis.	4.75
Thanks to health insurance, I/my family members have accessed cancer surgery and treatment.	4.2
Thanks to health insurance, I/my family members have accessed cancer treatment drugs and medications to control side effects.	3.98
Health insurance has helped me increase access to modern cancer treatment methods.	3.86
Health insurance does not cover new, low-side-effect drug listings.	4.17
Overall, out-of-pocket payments for direct expenses are greater than the health insurance coverage.	4.27
(2) For non-healthcare expenses	
Health insurance has reduced the financial burden for food expenses.	4.05
Health insurance has reduced the financial burden for transportation expenses.	3.96
Health insurance has reduced the financial burden for non-listed nutritional supplements.	4.03
Health insurance has reduced the financial burden for inpatient bed fees during hospitalization.	4.05
Health insurance has reduced the financial burden for other expenses.	3.95
Overall, out-of-pocket payments for indirect expenses are greater than the health insurance coverage.	4.46

Source: Survey results from the research topic

(1) For healthcare expenses:

Thanks to health insurance, patients have access to cancer screening and diagnosis (highest average

score - 4.75 points) and access to cancer surgery and treatment (average score 4.2). The impact of health insurance on direct healthcare financial

aspects is rated higher at the basic level compared to the advanced level.

The questions "*Thanks to health insurance, I/my family members have accessed cancer treatment drugs and medications to control side effects*" and "*Health insurance has helped me increase access to modern cancer treatment methods*" received average scores of 3.98 and 3.86, respectively. Regarding treatment methods, without health insurance, many patients cannot access highly effective therapies, nor do they have the financial capability to pursue advanced treatment methods if not receive financial aid promptly (Ministry of Health, 2023). According to Thuan, T. V., (2023), every 10 years, the cost of cancer treatment increases by 1.5 - 2 times because patients have access to more advanced diagnostic and treatment methods, including modern tests and updated surgical techniques (chemotherapy also employs new drugs to achieve better results). Regarding medication access, there are many new drugs with high efficacy and minimal side effects for cancer patients, but they are yet approved for reimbursement by health insurance. While many essential cancer treatment drugs are included in the primary list covered by health insurance, some drugs are commonly not available at public healthcare facilities, especially at commune and ward health stations (Ministry of Health, 2015). Drug procurement and management are not yet guaranteed, leading to situations where some necessary drugs are unavailable, causing patients to buy drugs from outside sources that are not reimbursed by health insurance, leading to higher costs.

"Some equivalent drugs in the health insurance reimbursement list depend on the doctor's prescription and the patient's condition. Treatment protocols and medications are narrow and specialized fields, and most patients and their relatives do not have deep specialized knowledge to determine whether the prescribed medication is appropriate. Additionally, in some places, patients with health insurance cards are directed to use socialized equipment, while there are still budget-funded machines, leading patients to pay the

difference between the two prices" (Notes from an in-depth interview with N.T.H.T, 38 years old, from the accounting department of a general hospital).

Moreover, in some provincial and central hospitals, there is still a "situation where drugs with similar components to drugs on the health insurance reimbursement list, which could reduce costs for patients, are not prescribed by doctors, causing disadvantages for patients" (Notes from an in-depth interview with Mr. T.V.Q, 48 years old, a doctor at GD hospital).

Although the majority of patients agree on the positive impact of health insurance on their cancer screening and treatment process, the question "*Out-of-pocket payments for direct expenses are greater than the health insurance coverage*" also scored 4.27 points, indicating that patients perceive health insurance as a supportive mechanism, risk-sharing, and burden-reducing for them.

(2) For non-healthcare expenses:

During the healthcare process, patients and their families still incur significant expenses for various healthcare items including food, transportation, non-listed nutritional supplements, inpatient treatment, and other expenses. The majority of patients tend to agree with the view that health insurance reimbursement for healthcare expenses has reduced the burden of non-medical expenses. The average scores for these questions do not differ significantly, ranging from 3.95 to 4.05 (Table 2). However, the question "*Overall, out-of-pocket payments for indirect expenses is greater than the health insurance coverage*" scored an average of 4.46 points, indicating similarity with previous studies on the burden of non-medical expenses and the high proportion of patient out-of-pocket payments. According to the Social Security Agency (VSS), (2024), citizens on average have to pay over 40% out of pocket during treatment.

In Vietnam, due to the referral policy, the majority of funds are still concentrated in the treatment sector and focused on higher-level facilities. Healthcare utilization data from health insurance

shows that two-thirds of the funds from health insurance are allocated to provincial and central hospitals. Healthcare facilities at the grassroots level, including district hospitals and commune health stations, which have over 80% of registered health insurance beneficiaries for initial medical consultations only have more than 30% of the health insurance funds. Of particular importance is the limited quality of healthcare services at the grassroots level, leading to patients bypassing commune and district-level facilities in favor of higher-level ones and continuing to bear higher costs.

"I am a retired military officer with health insurance, so I go for regular check-ups, but I only visit district-level healthcare facilities. Unfortunately, my early-stage liver cancer was not detected during these visits. It was only when the tumor grew large enough to cause noticeable symptoms that the disease was discovered. This has made treatment more difficult and expensive, and it has reduced my chances of recovery." (Notes from an in-depth interview with patient L.V.H., 67 years old, stage 4 liver cancer). In other words, the limited quality of healthcare services at the grassroots level is a reason why patients seek

medical care at higher-level facilities, resulting in increased non-medical expenses, hindrances, and delays in seeking medical treatment. Even patients undergoing regular check-ups at grassroots facilities may encounter situations where these facilities lack the necessary equipment and medical expertise to detect diseases at an early stage. Once again, this issue adds pressure to the cost of disease treatment and reduces patients' chances of recovery.

(ii) Psychological Impact:

For cancer patients, the majority of them experience anxiety about their finances when they visit hospitals for consultations, often seeking medical attention when the disease has already progressed to an advanced stage. Survey results indicate that 90.3% of patients surveyed believe that health insurance has reduced their fear and anxiety, 79.6% feel that health insurance has alleviated stress for both themselves and their families, and 67% agree that health insurance has encouraged them to undergo treatment instead of delaying it. However, only 44.7% of respondents believe that health insurance has impacted their confidence in overcoming the disease.

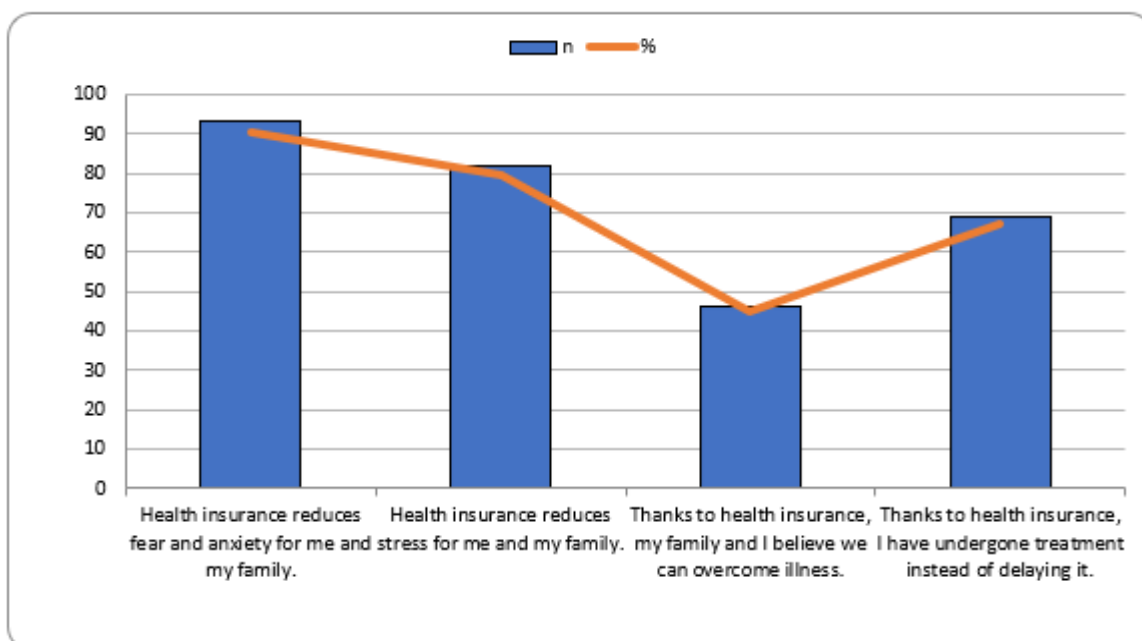


Figure 1: Survey Results on the Impact of Health Insurance on Patients' Psychological Well-being

Source: Survey conducted by the authors' group

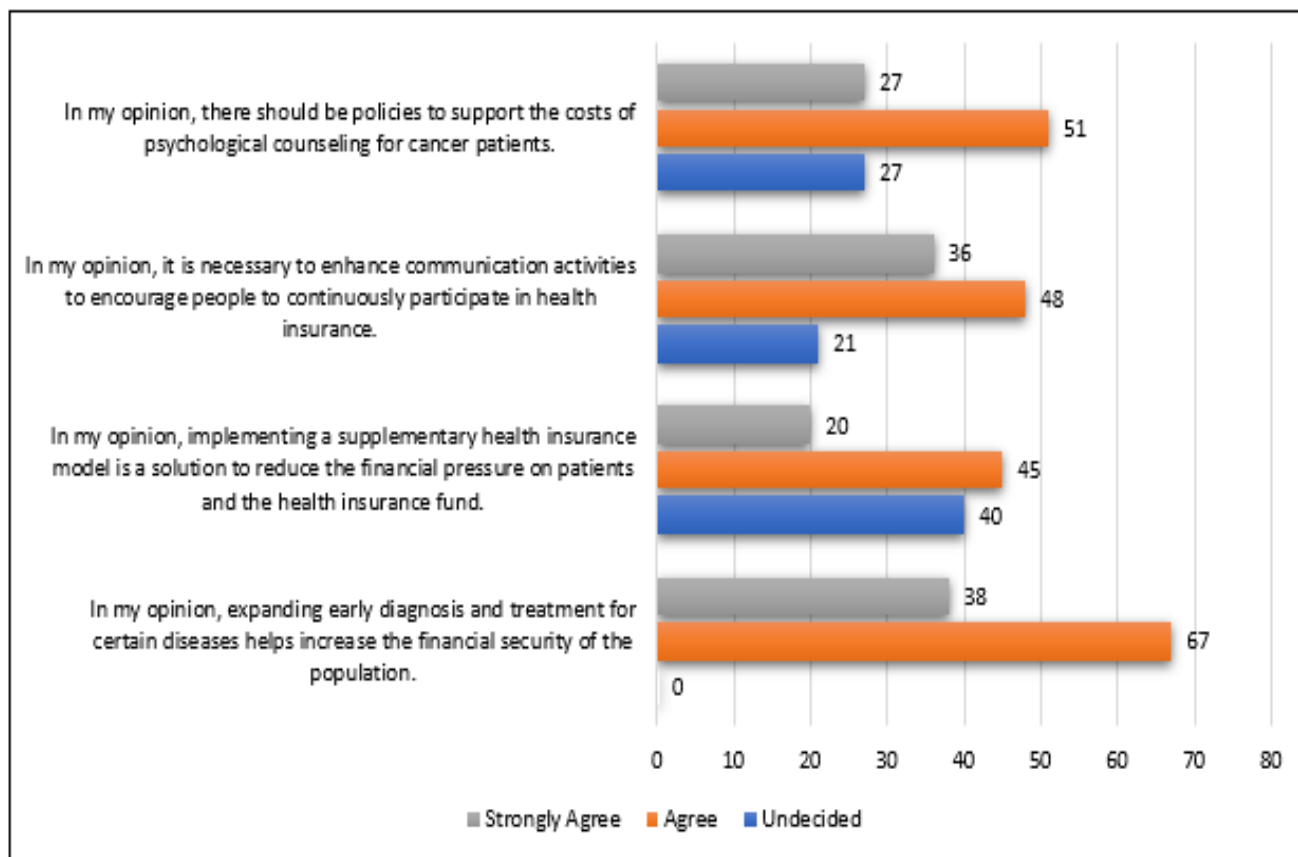
Regarding patients' psychological well-being, current communication themes and messages are still general and lack specific health promotion content, such as alcohol and beer harm prevention, reducing salt, sugar, and fat intake, and enhancing physical activity. Effective communication activities to guide people in preventing and early detecting non-communicable diseases in general, and cancer in particular, have not been efficiently implemented (Ministry of Health, 2023). An assessment in 2020 revealed that only 53.2% of the population had been informed and educated about cancer prevention through various media channels at both central and local levels (Ministry of Health, 2023). This underscores the need to focus on health communication alongside efforts to encourage continuous participation in health insurance to ensure maximum benefits during medical care.

5. Discussion and Policy Implications:

In Vietnam, the goal of implementing universal health insurance is multidimensional, aiming not

only to increase coverage (expansion) but also to improve the quality of healthcare services (depth) and reduce out-of-pocket expenses, disaster-related costs, and impoverishment due to healthcare expenditures (height). Based on the assessment report on the impact of amending the Health Insurance Law in 2024, the authors surveyed 105 cancer patients about some amendments directly affecting the rights of cancer patients. Three proposals are being submitted to the National Assembly, including (1) Expanding early diagnosis and treatment for certain diseases, (2) Implementing supplementary health insurance models, (3) Enhancing communication to encourage continuous enrollment in health insurance to maximize benefits from the Health Insurance fund; and (4) Including a policy to support the cost of psychological counseling for patients, which the research team added for survey feedback. The results are as follows:

Figure 2: Patients' Agreement Level on Some Proposed Amendments to the 2024 Health Insurance Law



Source: Survey conducted by the authors' group

According to the Likert scale, all proposed amendments received responses ranging from undecided to agree and completely agree; there were no instances of disagree or strongly disagree options. Particularly, the proposal to expand early diagnosis and treatment for certain diseases received the highest level of consensus, aiming to enhance financial healthcare coverage for the population.

(1) Solution to expand early diagnosis and treatment of cancer.

Currently, medical services used in the diagnosis and treatment of cancer, including tests, imaging diagnostics, surgeries, procedures, medications, and chemicals, all fall within the scope of reimbursement from the Health Insurance Fund. The rights of health insurance participants are appropriately adjusted to meet the healthcare needs of the population. The organization of medical examination, treatment, and expense payment has significantly improved in terms of procedures and processes (VSS, 2024). However, the majority of cancer cases are detected at late stages (Among 105 cancer patients surveyed, 36.2% were diagnosed at stages II and III; 39% were at stage IV). Meanwhile, Vietnam lacks national guidelines on early cancer screening, and health insurance has not been prepared nor established mechanisms for funding screening programs. Active cancer screening requires substantial funding and is currently not feasible (Ministry of Health, 2015). Cancer screening and early detection in Vietnam mainly rely on sporadic programs and projects, lacking regularity and mostly depending on state funding, which is very limited. Around 380,000 people are screened for various types of cancer (Department of Preventive Medicine, 2021).

This leads to an increase in healthcare costs and a low rate of successful treatment. For patients with terminal illnesses such as cancer, the total cost of diagnosis and treatment is a significant burden for the majority of patients. Therefore, the supplemental proposal to cancer treatment rights is for Health Insurance to cover the cost of early detection screening for 6 common disease groups

that people often encounter. The Health Insurance Law has the effect of reducing out-of-pocket expenses for patients. Early diagnosis and detection of many non-communicable diseases will help reduce healthcare costs, and future treatment expenses, and prevent many diseases from worsening, thus reducing treatment costs. According to the World Health Organization (WHO) recommendation, a healthcare system is sustainable when the out-of-pocket healthcare expenditure is at 30% or below. Therefore, Vietnam aims to reduce this ratio to 35% by 2025 and 30% by 2030 (Ministry of Health, 2023).

(2) Solution to develop a supplementary health insurance model.

Some countries have developed supplementary health insurance models with the aim of narrowing the gap between basic health insurance and commercial health insurance, reducing the proportion of out-of-pocket payments by patients, and improving access to advanced drugs and treatments at reasonable insurance rates. However, according to the survey results of the article, the implementation of supplementary health insurance models is less agreed upon, as this solution requires additional contributions from individuals to the supplementary health insurance fund.

(3) Enhance communication to encourage continuous participation in health insurance.

There is a need to enhance communication activities to encourage continuous participation in health insurance among the population, increase the rate of cancer screening and early detection, as well as expand the scope of coverage by the Health Insurance Fund, and improve the effectiveness of negotiating cancer drug prices to alleviate the economic burden on patients (Son, P.N., et al., 2022).

(4) Supplementing policies to support psychological counseling for cancer patients

In addition to formal treatment methods, there are currently no guidelines on prescribing nutrition and physical activity for cancer patients, nor are there guidelines for counseling and psychotherapy for

cancer patients (Ministry of Health, 2023). However, when asked about the addition of policies for psychological counseling for patients, 27 respondents, corresponding to 25.7% of the surveyed patients, were ambivalent about this policy.

(5) *Some other solutions*

Furthermore, based on the current impact of health insurance and in-depth interview results, an important solution to focus on is enhancing the quality of healthcare at grassroots levels. The network participating in cancer prevention and control is mainly deployed at provincial hospitals and healthcare facilities. Commune health stations have not yet provided preventive, management, and care services for cancer patients (Ministry of Health, 2023). Registering for initial health insurance examinations at grassroots healthcare facilities will help manage people's health effectively and timely detect diseases at an early stage. However, as analyzed, the lack of equipment and medical expertise at grassroots levels leads to situations where despite regular check-ups, patients fail to detect diseases. To improve the effectiveness of healthcare at grassroots levels and instill trust in patients, it is essential to invest in infrastructure and medical staff at these levels. This will help minimize the health insurance fund's expenses for complications resulting from poor management at grassroots levels (Ministry of Health, 2024).

Enhancing statistical indicators is essential. Currently, Vietnam lacks data to report on the implementation results of these indicators. The cancer reporting network has gradually developed; however, it still does not ensure the collection and annual publication of standardized, high-quality data on Vietnam's new cancer cases and related indices (Ministry of Health, 2023).

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