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Access to positron emission tomography/ computed tomography (PET/CT) in Cyprus
A cross-sectional study

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Πρόσβαση σε εξετάσεις PET/CT για τον κυπριακό πληθυσμό: Μια συγχρονική μελέτη

Περίληψη στο τέλος του άρθρου

OBJECTIVE **To examine patient access to physician consultations and positron emission tomography/computed tomography (PET/CT) scans in Cyprus.** METHOD **A cross-sectional study was carried out between May 2020 and April 2021. The study population comprised Cypriot citizens aged 18 years or over who had undergone PET/CT scans. A customized questionnaire was used to record their socio-demographic characteristics, access to physicians, and access to PET/CT scans.** RESULTS **A total of 144 (96 male and 48 female) patients who had undergone a PET/CT scan were included in the study. Most participants (96.9%) reported that they did not experience barriers in accessing their physicians. A statistically significant association was demonstrated between the attending physician setting and the patient's self-assessment of economic status (p<0.000). Specifically, 85.7% and 91.7%, respectively, of the patients who consulted a physician in a private hospital or private practice, self-assessed their economic status as good/fair. Of patients who consulted a physician in a private hospital or private practice, 62.9% and 66.7%, respectively, reported an annual taxable income of above 19,500 € (p=0.001). Statistically significant association was identified between the reimbursement of examination costs and the self-assessment of economic status (p=0.043), and annual taxable income (p=0.046).** CONCLUSIONS **This study confirms that patients living in Cyprus face no barriers in accessing physicians and PET/CT scans without delay. Future research should assess approvals and rejections, to ascertain whether the PET/CT scans that are reimbursed are indeed covering pati ent needs.**

Key words

Cancer
Cyprus
Healthcare access
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The intrinsic goal of a healthcare system is to protect, improve and maintain the health of the entire population, taking into account both morbidity and mortality.[1] Everyone, and in particular those with health insurance, should have access to high-quality healthcare services. High-quality health care prevents diseases and improves the quality of life (QoL). Indicators for measuring the quality of a healthcare system should assess the degree to which the services are effective, efficient, accessible, acceptable, patient-centred, equitable and safe.[2] High quality health services are encapsulated within the definition of universal health coverage (UHC), which is still not available in many countries throughout the world. The United Nations (UN) Political Declaration of UHC adopted by world leaders in October 2019,[3] reaffirmed the commitment to progressively cover more people with high quality essential health services, but there continue to be inequalities in access to healthcare services in many countries.

A variety of factors can affect access to health care, including the availability of healthcare services in the geographical area of the stakeholders, and barriers to transportation, either because travel time is excessive, or travel costs are prohibitive.[4] Another factor is the ease of making an appointment, as lengthy waiting times can impede the use of health services.[5] The patient's ability to pay for health care, or health insurance coverage might be another limitation factor. Barriers to health care appear to be increasing for people of low socioeconomic status, which may discourage them from seeking care, and consequently exacerbate their health condition.[6–9] Barriers to access to healthcare services are an international phenomenon, particularly in low- and middle-income countries.[10,11] As

reported by the recently launched Europe's Beating Cancer Plan, inequalities in healthcare services in oncology can be seen in the variable access to prevention programmes, and in rates of early detection, diagnosis, treatment and survival, and also in measures taken to improve the QoL of patients with cancer and survivors.[3] Oncological patients concern a patient group of particular interest, because of the high cost of treatment, the multidimensionality of the disease, the psychosocial burden, and the course of the disease, all of which place increased demands on, and expectations from the health system.[12]

One of the most important diagnostic tools in the management of most types of cancer is positron emission tomography combined with computed tomography (PET/CT). PET/CT may detect the early onset of malignancies, and is used for diagnosis, staging, restaging and evaluation of a treatment response. It has been estimated that approximately 10–15% of patients who underwent PET/CT scans had the stage of their disease changed, and their treatment amended.[13] PET/CT enables clinicians to evaluate the effectiveness of treatment much earlier, compared with traditional radiological examinations.[13] Although PET/CT is a more expensive examination than other imaging techniques, the potential savings associated with its use are many, including avoiding unnecessary imaging and invasive procedures, and optimization of treatment decisions.[14]

Country-specific epidemiological data confirmed that at least 96 countries should upgrade their PET/CT services, and that more scanners would be required to meet increasing patient needs.[15] Cyprus did not have UHC until 2019, when it introduced a new National Health System (NHS) that aims to provide universal coverage.[16] Prior to this, the healthcare system of Cyprus consisted of separate public and private sectors. Many people preferred private providers for specialized care, because of long waiting times in public hospitals for certain services, mainly due to limited resources. In 2016, Cyprus initiated sustainable development goal (SDG) actions to achieve UHC. In 2019, following World Health Organization (WHO) policy, Cyprus introduced a modern anthropocentric healthcare system that enables all individuals, regardless of income, to choose healthcare providers from both the public and private sector. The new NHS in Cyprus aims to shorten waiting times, improve the quality of health care, and reduce out-of-pocket payments.[16,17]

An example of the possibilities provided in health care by the establishment of the new NHS in Cyprus is the access to PET/CT. In Cyprus, there is currently only one PET/CT unit, which is in the private sector. Although the current NHS of Cyprus does not have a PET/CT unit, it contracts services from the private health institution that owns the PET/CT unit to cover patient needs. NHS patients in Cyprus require referral from a doctor in the NHS or the private sector, and approval of the referral by the Ministry of Health (MoH) to access a PET/CT, a process which could affect waiting times in a condition where time is of essence.

To date, no assessment has been made of the accessibility by patients of the sole PET/CT unit in Cyprus. Such assessment is essential to identify whether there is a gap that the new NHS should address. This study investigated whether patients encountered any difficulties or barriers to access to a physician or a PET/CT.

MATERIAL AND METHOD

Study design and population

A descriptive, observational cross-sectional study was conducted between May 2020 and April 2021 to assess whether patients in Cyprus experienced barriers in access to either a physician or PET/CT scan. Participants were recruited from the Department of Nuclear Medicine of the German Oncology Centre (GOC) in Cyprus, which operates a PET/CT unit serving patients from both the NHS and the private sector. Inclusion criteria for participation in the study were: age 18 years or over, understanding and speaking Greek sufficiently well, and having undergone a PET/CT scan.

Data collection and survey instrument

Data collection was carried out by a qualified member of staff of the GOC. Initially, individuals were informed of the voluntary nature of their participation and the anonymity and confidentiality of the data collected. The data were collected using a 19-item questionnaire consisting of closed-ended and multiple-choice questions, in three main sections: (a) 10 items on demographic and socio-economic characteristics (gender, age, place of birth, place of residence, educational level, profession, annual income, self-assessment of economic situation), and health insurance status (insurance status, type of health insurance), (b) 5 items on clinical and medical parameters related to the disease history and management (year of diagnosis, frequency of medical visits, attending physician setting: hospital or physician's office, whether the treatment required short-term hospitalization, presence and type of barriers to access to healthcare), and (c) 4 items on access to PET/CT scans (time to doctor's appointment, time to approval by the MoH, type of scan). The questionnaire content was based on a previous study.[18] A panel of experts reviewed the first version of the questionnaire for the clarity and applicability of all the items.

Statistical analysis

Baseline participant characteristics are reported as

mean±standard deviation (SD) for continuous variables with normal distribution, and as median (interquartile range, IQR) for continuous variables with skewed distribution, while categorical variables are presented as absolute (n) and relative (%) frequencies. The Shapiro-Wilk test was used to check whether numeric variables were normally distributed. To detect association between self-assessment of economic status and annual income and access to health care, Pearson's Chi-square test was used. Educational level was classified into three categories commonly used in Cyprus: Primary education (<7 years of schooling), secondary education (7–12 years of schooling), and higher education (participants with a university degree: >12 years of schooling). All statistical tests were two-tailed, with the statistical significance level set at α=0.05. Statistical analysis was conducted using the Statistical Package for Social Sciences (SPSS), version 26.0 (SPSS Statistics, IBM, Somers, NY, USA).

Ethics approval

This study was conducted according to the Declaration of Helsinki guidelines, and all procedures involving research study participants were approved by the Cyprus National Bioethics Committee (CNBC) (ΕΕΒΚ ΕΠ 2020.01.96). All participants signed a written consent form to participate in the study, after being provided with all relevant information.

RESULTS

Data from 144 patients (96 male and 48 female) who underwent PET/CT scan in the GOC were collected and analysed. The majority of the participants (96.5%) were Cypriot citizens, their median age was 53 years (IQR 29 years), and 50% had a higher education degree. A large percentage of study participants were employed in the private sector (43.1%), 25.7% were retired, and the remaining were self-employed (11.1%), state employees (9%), unemployed (4.2%) or students (2.8%). Regarding income, 59.7% of the respondents reported an annual taxable income of less than 19,500 €, which is the limit above which taxpayers contribute to the Republic of Cyprus, while 46.5% reported their economic status as being "sufficient/fair". Only 5.6% of the patients were uninsured; 73% had either public (67.2%) or private insurance (5.8%) or both (27%). The demographic and socio-economic characteristics of the patients participating in the study are presented in table 1.

Table 2 shows the disease history and management of the patients according to socio-economic determinants. More than half (54.9%) of the participants reported visiting their physician at least once a month, and 27.1% once every 3 months. A large percentage of study population (67.2%) reported their attending physician's setting to be the Bank

Table 1. Demographic and socio-economic characteristics and health insurance of patients undergoing positron emission tomography/computed tomography (PET/CT) scans (n=144).

Characteristics	n (%)
Gender	
Male	96 (66.7)
Female	48 (33.3)
Place of birth	
Cyprus	139 (96.5)
Other	5 (3.5)
Age in years median (IQR)	53 (29.0)
Age group (years)	
<25	11 (7.6)
26–35	25 (17.4)
36–50	30 (20.8)
51–65	45 (31.3)
>66	33 (22.9)
Place of residence	
Nicosia	58 (40.3)
Limassol	45 (31.3)
Larnaca	21 (14.6)
Ammochostos	8 (5.6)
Paphos	11 (7.6)
Educational level	
Primary	6 (4.2)
Secondary	66 (45.8)
Higher	72 (50.0)
Annual taxable income (€)	
<19,500	86 (59.7)
19,500–28,500	18 (12.5)
28,500–36,300	20 (13.9)
36,300–60,000	12 (8.3)
>60,000	8 (5.6)
Self-assessment economic status	
Sufficient plus savings (good)	23 (16.0)
Sufficient (fair)	67 (46.5)
Bad	50 (34.7)
Very bad	4 (2.8)
Profession	
State employee	13 (9.0)
Private employee	62 (43.1)
Self-employed	16 (11.1)
Unemployed	6 (4.2)
Student	4 (2.8)
Retired	37 (25.7)
Other	6 (4.2)
Insurance	
Insured	136 (94.4)
Non-insured	8 (5.6)
Type of insurance	
Public	92 (67.2)
Private	8 (5.8)
Both	37 (27.0)

IQR: Interquartile range

of Cyprus Oncology Center (BOCOC), which is contracted to the Cyprus NHS (44.0%), or the public hospital (23.1%), while the remaining 32.9% had chosen a physician either employed by a private hospital (24.5%) or who worked as a private practitioner (8.4%). A statistically significant association was demonstrated between the attending physician setting and the self-assessment of economic status (p<0.000). Specifically, among the patients who consulted a physician working in a private hospital or private practice, 85.7% and 91.7%, respectively, self-assessed their economic status as "good/fair". A statistically significant association was also shown between the attending physician setting and annual income (p=0.001). Of the patients consulting a physician employed in a private hospital or working in private practice, 62.9% and 66.7%, respectively, reported annual taxable income that exceeded 19,500 €. For more than 2/3 of patients who declared annual income below 19,500 €, the physician of choice was employed either in a public hospital or BOCOC. In addition, 18.1% of patients had a PET/CT scan while receiving cancer therapy during short-term hospitalisation. Only 4 patients (3.1%) encountered obstacles in access to a physician, specifically a long waiting time for an appointment, inability to afford the cost of the appointment, a long distance from the physician, and transportation difficulties (tab. 2).

Table 3 presents patient access to PET/CT scans according to socio-economic determinants. Of the participants,

Table 2. Disease history and management of patients undergoing positron emission tomography/computed tomography (PET/CT) scans according to socio-economic determinants (n=144).

	Total n (%)	Self-assessment of economic status		p-value	Annual income		p-value
		Good/fair n (%)	Bad/very bad n (%)		<19,500 € n (%)	>19,500 € n (%)	
Frequency of patients visits to physicians							
>1 visit per month	38 (28.6)	23 (60.5)	15 (39.5)	0.611	27 (17.1)	11 (28.9)	0.557
1 visit per month	35 (26.3)	21 (60.0)	14 (40.0)		20 (57.1)	15 (42.9)	
1 visit per 3 months	36 (27.1)	21 (58.3)	15 (41.7)		19 (52.8)	17 (47.2)	
1 visit per 6 months	20 (15.0)	12 (60.0)	8 (40.0)		12 (60.0)	8 (40.0)	
1 visit per 12 months	4 (3.0)	4 (100.0)	0 (0.0)		2 (50.0)	2 (50.0)	
Attending physician setting							
Public hospital	33 (23.1)	13 (39.4)	20 (60.6)	*0.000*	25 (75.8)	8 (24.2)	*0.001*
Private hospital	35 (24.5)	30 (85.7)	5 (14.3)		13 (37.1)	22 (62.9)	
BOCOC	63 (44.0)	35 (55.6)	28 (44.4)		44 (69.8)	19 (30.2)	
Private practice	12 (8.4)	11 (91.7)	1 (8.3)		4 (33.3)	8 (66.7)	
Medical treatment received requires short-term hospitalization							
Yes	25 (18.1)	16 (64.0)	9 (36.0)	0.723	16 (64.0)	9 (36.0)	0.723
No	113 (81.9)	68 (60.2)	45 (39.8)		68 (60.2)	45 (39.8)	
Barriers in accessing physician							
Yes	4 (3.1)	2 (50.0)	2 (50.0)	0.615	3 (75.0)	1 (25.0)	0.546
No	125 (96.9)	78 (62.4)	47 (37.6)		75 (60.0)	50 (40.0)	
Year of diagnosis							
2020–2021	76 (53.1)	45 (59.2)	31 (40.8)	0.446	50 (65.8)	26 (34.2)	0.162
2018–2019	43 (30.1)	27 (62.8)	16 (37.2)		25 (58.1)	18 (41.9)	
2016–2017	12 (8.4)	8 (66.7)	4 (33.3)		6 (50.0)	6 (50.0)	
2015 and earlier	12 (8.4)	10 (83.3)	2 (16.7)		4 (33.3)	8 (66.7)	

BOCOC: Bank of Cyprus Oncology Center

Italiques indicate statistically significant association

54.5% scheduled their appointment for a PET/CT scan within a week of the physician's referral. Regarding payment, 14 patients paid for the scan with private resources (11 were reimbursed by private insurance and 3 paid out of pocket), without requesting approval by the MoH. For those requesting approval by the MoH, 89.4% received permission to proceed within a week. In addition, 90.2% of the participants reported that their examination costs were covered by their public insurance. Regarding the type of PET/CT exam, 18F-fluorodeoxyglucose (18F-FDG) was the most commonly used radiopharmaceutical (80.1%); 6.4% of the patients who had an 18F-PSMA PET/CT scan scheduled the scan 1 to 3 weeks in advance. A statistically significant association was demonstrated between the examination costs and the self-assessment of economic status (p=0.043). Specifically, among the patients who reported using private insurance to cover the cost of the scan, 90.9% self-assessed their economic status as "good/fair", and a statistically significant association was found between covered examination costs and annual taxable income (p=0.046) (tab. 3).

DISCUSSION

This study investigated access to physicians and PET/CT scans by patients with cancer in Cyprus. The results revealed that patients in Cyprus, overall, have excellent access to cancer healthcare services, and specifically to PET/CT scans. Very few patients who underwent PET/CT scans (3.1%) encountered obstacles in accessing a physician. In addition, 89.5% of participants scheduled their appointment for a PET/CT scan within two weeks of referral.

A statistically significant association was found between

Table 3. Access of patients to positron emission tomography/computed tomography (PET/CT) scans according to socio-economic determinants (n=144).

	Total n (%)	Self-assessment of economic status		p-value	Annual income		p-value
		Good/fair n (%)	Bad/very bad n (%)		<19,500 € n (%)	>19,500 € n (%)	
Time until PET/CT scanning							
One week	78 (54.5)	44 (56.4)	34 (43.6)	0.302	47 (60.3)	31 (39.7)	0.647
Two weeks	50 (35.0)	37 (74.0)	13 (26.0)		31 (62.0)	19 (38.0)	
Three weeks	8 (5.6)	4 (50.0)	4 (50.0)		4 (50.0)	4 (50.0)	
Four weeks	4 (2.8)	2 (50.0)	2 (50.0)		1 (25.0)	3 (75.0)	
Five weeks and more	3 (2.1)	2 (66.7)	1 (33.3)		2 (66.7)	1 (33.3)	
Time until approval by the MoH							
One week	110 (89.4)	65 (59.1)	45 (40.9)	0.819	66 (60.0)	44 (40.0)	0.659
Two weeks	9 (7.3)	6 (66.7)	3 (33.3)		5 (55.6)	4 (44.4)	
Three weeks	3 (2.4)	2 (66.7)	1 (33.3)		2 (66.7)	1 (33.3)	
Four weeks and more	1 (0.8)	1 (100.0)	0 (0.0)		0 (0.0)	1 (100.0)	
Covered examination costs							
Public insurance	129 (90.2)	76 (58.9)	53 (41.1)	*0.043*	81 (62.8)	48 (37.2)	*0.046*
Private insurance	11 (7.7)	10 (90.9)	1 (9.1)		3 (27.3)	8 (72.7)	
Pay out of pocket	3 (2.1)	3 (100.0)	0 (0.0)		1 (33.3)	2 (66.7)	
Type of examination							
18F-FDG	113 (80.1)	72 (63.7)	41 (36.3)	0.668	67 (59.3)	46 (40.7)	0.963
18F-PSMA	9 (6.4)	5 (55.6)	4 (44.4)		6 (66.7)	3 (33.3)	
Not known	16 (11.3)	9 (56.6)	7 (43.8)		10 (62.5)	6 (37.5)	
Other	3 (2.1)	1 (33.3)	2 (66.7)		2 (66.7)	1 (33.3)	

MoH: Ministry of Health, 18F-FDG: 2-[18F] fluoro-2-deoxy-D-glucose, 18F-PSMA: Prostate-specific membrane antigen

Italiques indicate statistically significant association

the attending physician setting and both self-assessment of economic status and annual taxable income. A reasonable explanation is that patients who have the financial ability (private insurance or own funds) choose services from the private sector.[19] In contrast, 75.8% and 69.8%, respectively, of patients with annual taxable income below 19,500 € chose a physician employed in a public hospital or BOCOC. Their lower income may directly influence their choice of provider and may also impact their overall access to healthcare services.

A recent study in Greece assessing the barriers to access to healthcare services encountered by patients with cancer found that approximately 31.0% of patients faced significant barriers to access to healthcare services for cancer treatment.[20] Long waiting time for a medical appointment (51.0%), and inaccessibility of private physicians due to inability to pay the out-of-pocket fee (44.0%), were among the main barriers, which led to treatment delay and various adverse health outcomes.[20] Similar results were reported in a twelve country study including 6,588 patients with breast cancer, in which the mean delay between the first medical visit and the start of treatment was 14.3 weeks, with a range of 11.5–29.4 weeks.[21] Treatment delay can increase the morbidity and mortality for most types of cancer, especially breast, head and neck (including lip and oral cavity) and cervix.[22] The difference in examination delay between our findings and those reported previously may be explained by the establishment of a universal NHS in Cyprus since the publication of these studies. The NHS may have addressed barriers related to the long physical distance from the physician's setting, long waiting times for access to services and the number of patients in proportion to the available healthcare resources. This study confirms adequate levels of access to PET/CT scans across the Republic of Cyprus, and validates the findings from our previous study, which concluded that the NHS of Cyprus should not invest in establishing its own PET/CT unit for executing scans only with 18F-FDG, as such an investment would not be viable in absolute economic terms during its estimated service life.[23]

Operation of a PET/CT unit in a convenient location (less than 150 km from the most distant area in the Republic of Cyprus) helps to address the challenges reported in other studies with regard to geographic access to services. A study in Australia reported that the distribution of PET/CT units is uneven, as the available units are located in the capital cities or areas with high density, while in the Northern Territory (1.42 million km^2 and 246,500 citizens) there is no unit.[24] Geographical inequalities and barriers to access are also reported in low population countries and low-density areas, where citizens are reported to experience barriers to access caused by the distance from specialized medical staff. [25,26]

One of the limitations of this study was its cross-sectional design that recorded feedback from patients at a single point in time. In addition, self-reported data may include misreporting or information bias, due to over- or underestimation by the respondents. A larger sample size would address these biases and increase reliability. This study included only patients who had scheduled a PET/CT scan, and there was no information from patients who could not schedule a scan, because of either rejection of their referral by the MoH or lack of the necessary financial resources to cover the cost. Our results may therefore overestimate accessibility, and a future study should examine the approvals and rejections by the MoH, to ascertain whether PET/CT scans reimbursed are indeed covering patient needs.

In conclusion, health systems play an important role in promoting health equality by ensuring that every patient has access to high-quality healthcare services. The present study examined the possible barriers to access to a physician and a PET/CT scan of patients living in Cyprus. The respondents reported that they did not experience any barriers in accessing their physician or a PET/CT scan. The Cyprus NHS decision to contract services from the GOC, which operates the only PET/CT unit in Cyprus, has contributed to eliminating obstacles to scanning.

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ΠΕΡΙΛΗΨΗ

Πρόσβαση σε εξετάσεις PET/CT για τον κυπριακό πληθυσμό: Μια συγχρονική μελέτη

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ΣΚΟΠΟΣ Η διερεύνηση της πρόσβασης των ασθενών σε ιατρό και στην εξέταση PET/CT στην Κύπρο. **ΥΛΙΚΟ-ΜΕΘΟΔΟΣ** Μια συγχρονική μελέτη έλαβε χώρα μεταξύ Μαΐου 2020 και Απριλίου 2021. Στην παρούσα μελέτη συμμετείχαν ασθενείς ηλικίας 18 ετών ή μεγαλύτεροι που ήταν κάτοικοι της Κύπρου. Χρησιμοποιήθηκε ένα προσαρμοσμένο ερωτηματολόγιο για την καταγραφή των κοινωνικο-δημογραφικών χαρακτηριστικών, της πρόσβασης στον ιατρό και της πρόσβασης σε εξέταση PET/CT. **ΑΠΟΤΕΛΕΣΜΑΤΑ** Στη μελέτη συμμετείχαν 144 ασθενείς (96 άνδρες και 48 γυναίκες), οι οποίοι υποβλήθηκαν σε εξέταση PET/CT. Οι περισσότεροι συμμετέχοντες (96,9%) ανέφεραν ότι δεν αντιμετώπισαν κάποιο εμπόδιο στην πρόσβαση στον ιατρό τους. Διαπιστώθηκε στατιστικά σημαντική συσχέτιση αναφορικά με τον χώρο εργασίας του ιατρού και την αυτο-αξιολόγηση της οικονομικής κατάστασης των συμμετεχόντων (p<0,000). Συγκεκριμένα, μεταξύ των ασθενών οι οποίοι αποφάσισαν να παρακολουθούνται από ιατρό που εργάζεται σε ιδιωτικό νοσοκομείο ή ασκεί ελεύθερο επάγγελμα, 85,7% και 91,7%, αντίστοιχα, αυτο-αξιολόγησαν την οικονομική τους κατάσταση ως «καλή/αρκετά καλή». Από τους ασθενείς που είχαν επιλέξει να παρακολουθούνται από ιατρούς που είτε εργάζονταν σε ιδιωτικό νοσοκομείο είτε ασκούσαν ελεύθερο επάγγελμα, 62,9% και 66,7%, αντίστοιχα, δήλωσαν φορολογητέα ετήσια εισοδήματα >19.500 € (p=0,001). Επί πλέον, διαπιστώθηκε στατιστικά σημαντική συσχέτιση μεταξύ κάλυψης δαπάνης της εξέτασης PET/CT και της αυτο-αξιολόγησης της οικονομικής κατάστασης (p=0,043) και του ετήσιου φορολογικού εισοδήματος (p=0,046). **ΣΥΜΠΕΡΑΣΜΑΤΑ** Η παρούσα μελέτη επιβεβαιώνει ότι οι ασθενείς που διαμένουν στην Κύπρο δεν αντιμετωπίζουν κάποιο εμπόδιο όσον αφορά στην πρόσβαση στον ιατρό και στην εξέταση PET/CT χωρίς καθυστερήσεις. Μελλοντική έρευνα θα πρέπει να αξιολογήσει τις εγκρίσεις και τις απορρίψεις, για να διαπιστωθεί εάν οι εξετάσεις PET/CT που αποζημιώνονται καλύπτουν πράγματι τις ανάγκες των ασθενών.

Λέξεις ευρετηρίου: Καρκίνος, Κύπρος, PET/CT, Πρόσβαση στις υπηρεσίες υγείας, Τομογραφία εκπομπής ποζιτρονίων σε συνδυασμό με υπολογιστική τομογραφία

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