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PATIENT'S SATISFACTION ASSESSMENT WITH PHYSICAL MEDICINE AND REHABILITATION SERVICES IN PRIVATE AND PUBLIC OUTPATIENT UNITS

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ABSTRACT

Background: Medical rehabilitation, overseen by physical medicine and rehabilitation specialists, is offered through contracts with national health insurance or private payment in various healthcare settings. Assessing changes in healthcare services is vital to improving patient satisfaction, health outcomes, and overall quality of life. This study focuses on patient satisfaction and preferences in public and private medical rehabilitation services within outpatient institutions of physical medicine and rehabilitation.

Methods: Conducted from April to July 2023, this cross-sectional study surveyed 100 patients (60% private healthcare system, 40% public healthcare system) using a 14-item questionnaire. The questionnaire covered various aspects, including treatment quality, information accessibility, and waiting times. Data were analyzed using Microsoft Office Excel.

Results: Patients, particularly females over 40, showed higher referral rates for medical rehabilitation services. Patient satisfaction assessments indicated positive perceptions of the quality of services in both public and private outpatient institutions.

Discussion: Privately treated patients expressed greater satisfaction with the quality of medical services, treatment information, accessibility, waiting times, and medical equipment compared to those treated publicly. Despite coexisting health systems, patient perceptions of public institutions tend to be negative.

Conclusion: Overall, patients in private rehabilitation institutions reported higher satisfaction levels. Study limitations include a small participant pool, emphasizing the need for broader research to generalize findings nationally. This research sheds light on patient preferences and satisfaction, contributing to ongoing efforts to enhance medical rehabilitation services.

Keywords: patient satisfaction, physical medicine, rehabilitation

Introducere

Modern medicine is constantly looking for new ways of diagnosis and treatment, with medical services being directed towards new curative therapeutic modalities. At the same time, physical medicine and rehabilitation services are constantly developing along with the development of preventive solutions and programmes.

Physical Medicine and Rehabilitation is a clinical medical specialty dealt with the prevention, diagnosis, treatment and rehabilitation management of people of all ages with disabling health conditions and their co-morbidities, addressing in particular their impairments and activity limitations with the aim of facilitating physical and cognitive functioning, participation (including quality of life) and modification of personal and environmental factors (1, 2).

The specialty of Physical Medicine and Rehabilitation is considered the medical specialty of functioning, and the instrument of this specialty is the International Classification of Functioning, Disability and Health (ICF)-WHO 2001 (2).

The aim of this specialty is to enable people with disabilities to lead the life they want and achieve maximum participation and performance (3).

The PMR specialist is the coordinator of the activity of the multi-professional medical rehabilitation team consisting of: PMR specialist, nurse, physiotherapist, kinesiotherapist, masseur, speech therapist, psychologist, occupational therapist, orthotist, social worker and other professionals (4).

Physical medicine and rehabilitation services are performed and recommended by the PMR specialist. These services include: anamnesis, specific functional assessment, specific manoeuvres, investigations, diagnostic and therapeutic interventions, specific medical rehabilitation procedures, follow-up evaluation.

Access to health services according to the Constitution is free, accessible and equal for all citizens.

Patients can benefit from medical rehabilitation treatment under contract with National Health Insurance House or privately against payment in public and private institutions. A maximum of 4 procedures/day of treatment is paid for each insured person, the number of settled therapies may vary from one private health unit to another, depending on the health service contracts negotiated with the county health insurance companies under the framework contract. Medical rehabilitation services such as ozone therapy, Gerovital treatment or facial massage are not reimbursed by NHIH (4).

In Romania there are public and private health systems. These two health systems are also found in outpatient physical medicine and rehabilitation units. The objective of the existence of public and private outpatient physical medicine and rehabilitation units is to improve the efficiency and quality of medical care, physical medicine and rehabilitation services in Romania and to achieve real health benefits for the population.

Financing of physical medicine and rehabilitation healthcare providers comes from the state budget, with NHIH as the funder through the county insurance houses, social health insurance, private health insurance and direct patient payments (5, 6).

In the healthcare system, the demand for physical medicine and rehabilitation services is influenced by the price of services. Price influences the consumer's decision to seek treatment in the public or private health system, whether by referral note or payment, the type and number of services purchased. The patient's decision about his or her health, the type and number of procedures performed is influenced by the recommendations of the physical medicine and rehabilitation specialist. The behaviour of physical medicine and rehabilitation providers affects positively or negatively the efficiency, costs, quality of medical services and the health status of the patient (5).

The large medical staff in rehabilitation is present in both the public and private healthcare systems. Medical staff is motivated primarily by patient health care but also by job satisfaction and financial remuneration.

Physical medicine and rehabilitation healthcare services are constantly changing and improving. It is necessary to assess whether these changes improve patient satisfaction, health and quality of life.

The quality of healthcare can be assessed by various methods:

- Observation of services by the specialist
- Patient satisfaction evaluation forms
- Review of recorded data
- Survey of medical staff
- Patient discharge survey (7).

Patient satisfaction with the healthcare services provided and the factors that influence these healthcare services have become a major objective of studies in the literature. The quality of healthcare services provided is a key objective in meeting patient needs (8).

Hence, patient satisfaction is an important parameter for measuring the quality of healthcare services including physical medicine and rehabilitation. Patient satisfaction can be defined as an opinion, subjective patient perception of several aspects of the healthcare services received.

Measuring patient satisfaction is an important element in assessing the quality of health services provided but also in allocating resources as efficiently as possible to areas that need to be improved to meet patient needs and expectations. For public health institutions, this objective may not be of interest as they may be disinterested in profit, but for private health institutions where there is competition

in the market, meeting patient satisfaction and expectations is important as these patients are more likely to return to the clinic, increasing public image and financial profit (8).

Assessing patient satisfaction is complex given its multidimensionality. It is made up of different aspects and expectations of the patient that may not be related to the quality of the healthcare received. There are various factors that influence patient satisfaction, factors that are related to the healthcare unit: quality of health services, communication with medical staff, attitude of medical staff, skills of medical staff, access to care, atmosphere in the healthcare unit, waiting time, medical costs, medical facilities; but also factors that are related to the patient: age, gender, level of education (8, 9).

A study conducted in outpatient health services in China suggests that respect is one of the most important predictors of patient satisfaction (10).

Odebiyi D.O, Tella A. analysed patient satisfaction of receiving medical rehabilitation treatment in 4 private hospitals and 3 public hospitals in Nigeria in 2009. A total of 639 patients participated in the study and completed a questionnaire. Patients who received medical rehabilitation treatment in private hospitals had a higher level of satisfaction. The low level of satisfaction of patients treated in public hospitals was due to therapeutic facilities and appointment time. The findings indicate that the government should provide adequate facilities to the medical rehabilitation departments in public hospitals to handle the demands of the increased number of patients (11).

The analysis of physical medicine and rehabilitation services was investigated in 2018-2019 and in a study on public and private health units in Romania. This study conducted on 260 patients shows that there is a major difference between public and private rehabilitation services. The low level of satisfaction of patients who underwent medical rehabilitation treatment in public health units was determined by the quality of services, clinic facilities, medical equipment, patient privacy, etc (12).

A 2013 study by Amin M., Nasharuddin S.Z. which aimed to investigate hospital health services and their effect on patient satisfaction reports that 5 important dimensions: patient access, medical service, overall service,discharge and social responsibility are distinguishing factors for health service quality. The results show that establishing and maintaining high levels of health services will lead to high levels of patient satisfaction (13).

In 2014, Tennakoon T and de Zoysa P conducted a cross-sectional study that assessed patient satisfaction with physiotherapy service in a public hospital in Sri Lanka. The study indicates that out of 150 participants, 60% were highly satisfied and 29.3% were moderately satisfied. The results indicate that this high level of satisfaction may mean that the physiotherapy service is of good standard or that patient expectations of care are low (14).

Different methods are used to analyse patient satisfaction: questionnaires, focus groups, feedback forms. Patient satisfaction in terms of expectations and perception are related to Donabedian's triad. The Donabedian model provides a framework for examining health services and the quality of healthcare. The Donabedian Triad consists of: structure: clinic, medical staff skills and clinic administrative system, process: the medical staff providing the medical services, outcomes: the results of the care provided such as recovery, evolution of disease, prognosis (8, 15-17).

The analysis of literature has provided us with a number of criteria by which we can assess patient satisfaction with the rehabilitation healthcare services provided, including methods of improving these healthcare services. The criteria are: access to health services, ambience, organisational structure of the clinic, attitude of the medical staff, communication with medical staff, skills of medical staff, cleanliness, medical facilities, medical costs, outcomes of medical services received (8, 18).

Patient satisfaction and quality of care are therefore crucial to the long-term success of the healthcare unit.

Although there are many studies worldwide on patient satisfaction with healthcare services, there are few studies for medical rehabilitation services, especially in Romania. These studies are important to identify and solve the problems of medical rehabilitation services such as improving

the quality of these medical services, improving the marketing of medical rehabilitation services, the need for investment in this medical area.

This study was conducted to assess patient satisfaction and preferences for public and private medical rehabilitation services and the quality of medical services among public and private outpatient physical medicine and rehabilitation institutions.

Materials and methods

We conducted a study focusing on patient satisfaction. Based on the criteria for assessing patient satisfaction and the factors influencing satisfaction identified in the literature, we created a 14-item questionnaire. In the first phase, we conducted a pilot study in which we applied the questionnaire to 10 patients to assess the clarity and understanding of the questions by patients. Following incomplete, elusive responses we reworked and improved the questionnaire items.

Only patients who had received physiotherapy treatment in the last 12 months and who had received a minimum of 7 physiotherapy treatment sessions were included in the study. This questionnaire consists of 3 parts: the first part is about the socio-demographic characteristics of the patient; the second part is the choice of the type of outpatient health unit and the costs of the rehabilitation medical services; the third part is about the characteristics of the health unit and the general satisfaction.

Two outpatient health units were selected: the Rehabilitation, Physical Medicine and Balneology Laboratory of the SCJU Constanta - public health unit, and the Vraja Mării in City clinic - private health unit belonging to the Asclepios health network.

Study participants were those who had undergone outpatient rehabilitation treatment in the previous 12 months. This study was conducted from April to July 2023, with 100 patients participating. The questionnaire was completed by 60 patients from the Vraja Mării in City clinic and 40 patients from the Medical Rehabilitation Laboratory of SCJU Constanta. Questionnaires were used in electronic and physical format.

The study started after receiving the approval of the Ethics Council of SCJU Constanta and Vraja Mării Medical Rehabilitation Hospital, Eforie Sud, Constanta and the informed consent of the patient. The Physical Medicine and Rehabilitation specialist distributed the questionnaire, explained the questionnaire items and assisted the patient in completing the questionnaire if necessary. The questionnaire was completed at the end of the treatment period and collected by the nurse or doctor.

All patients were informed about the study, responses were anonymous and confidential.

Results

A total of 100 patients participated in this study, of which 60 patients (60%) from the private health system and 40 patients (40%) from the public health system. Of these 100 patients, 67 were female (38-private, 29-public) and 33 male (22-private, 11-public). The mean age was 58.60 years with a minimum age of 27 years and a maximum age of 90 years in the private health system, and the mean age in the public health system was 59.27 years with an age range of 18-88 years. The most patients, i.e. 14 patients were in the 60-69 years category in the private healthcare system and 17 patients in the 60-69 years category in the public healthcare system. The majority of patients in both private-54 (90%) and public-31 (77.5%) healthcare systems were from urban.

From these data we observe higher referrals

Table 1. Distribution of patients by type of health facility

	Total patients (n)	Total patients (%)	Private (n)	Private (%)	Public (n)	Public (%)
Patient distribution	100	100.00	60	60.00	40	40.00
Male	33	33.00	22	22.00	11	11.00
Female	67	67.00	38	38.00	29	29.00
Environment	100	100.00	60	60.00	40	40.00
Urban	85	85.00	54	54.00	31	31.00
Rural	15	15.00	6	6.00	9	9.00

to physical medicine and rehabilitation services among females and over 40 years of age, with peak incidence in the 6th decade of life.

Of the patients who have now undergone rehabilitation treatment in the private healthcare system, 56 (93.33%) have also undergone rehabilitation treatment in the private healthcare system in the last 12 months. Of the 40 patients who presented to the public healthcare system, 35 of them (87.5%) had undergone rehabilitation treatment also in the public healthcare system in the last 12 months. The number of patients presenting to private healthcare unit is increasing yearly.

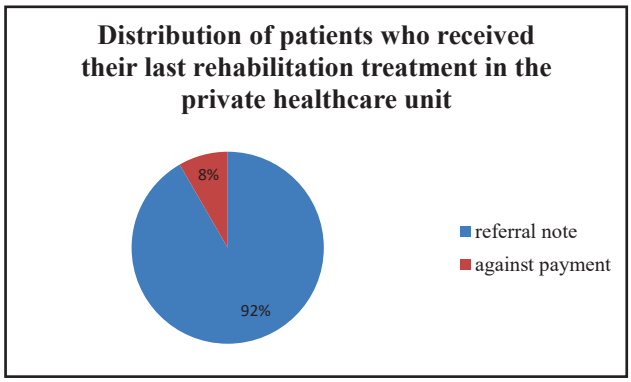


Figure 1. Distribution of patients who received their last rehabilitation treatment in the private healthcare unit.

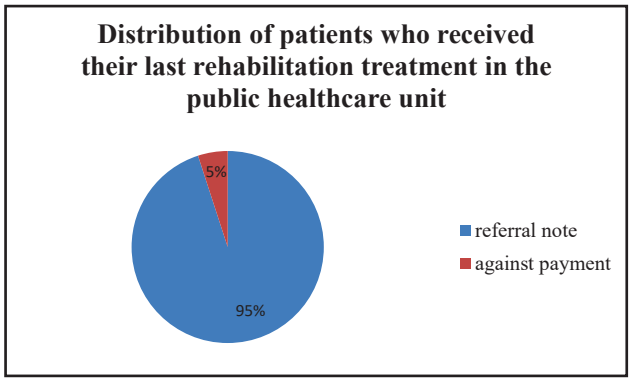


Figure 2. Distribution of patients who received their last rehabilitation treatment in the public healthcare unit.

From Figures 1, 2 we see that 92% and 95% of patients respectively chose to receive physical medicine and rehabilitation services by referral note in the private and public healthcare units. This modality provides patients medical rehabilitation services paid by NHIH. The services that are included for settlement by NHIH are a maximum of 4 procedures/day of treatment, the rest of the procedures or procedures that are not included in the list of procedures settled by NHIH are against payment, the rates varying from one healthcare unit to another.

The evolution of the patient's conditions who went to the medical rehabilitation units was favourable for 42 patients (70%) in the private health system and 30 patients (75%) in the public health system. In both health units, 1 patient had an unfavourable outcome. These results indicate the seriousness and efficiency of the medical act.

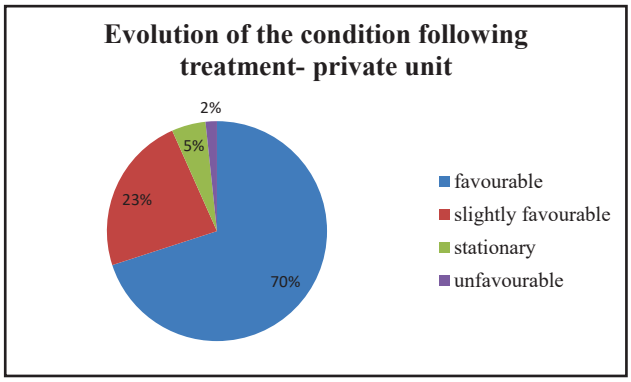


Figure 3. Evolution of the condition following treatment- private unit

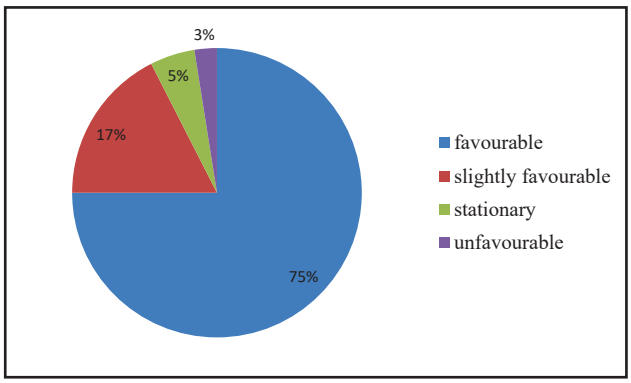


Figure 4. Evolution of the condition following treatment- public unit

The patient experience of the choice of healthcare facility was positive, as most patients choose to undergo future rehabilitation treatment in the same healthcare unit profile. A total of 56 out of 60 patients choose to seek future rehabilitation treatment in private health unit by referral note or against payment, and 31 out of 40 patients choose to seek future rehabilitation treatment in public health unit by referral note.

Based on their experience, most patients recommend that their loved ones seek treatment in the same health unit profile. One of the reasons for choosing a public health unit is lower costs

and the fact that any public outpatient unit pays for 4 procedures/day of treatment. Referral to the health unit for close relatives is a factor indicating increased patient satisfaction with health services.

The amount that patients are willing to spend on additional medical rehabilitation services differs depending on the type of health institution they choose. Twenty-six out of 60 patients who underwent rehabilitation treatment in a private health institution spend more than 500 lei for medical rehabilitation services, compared to no patients who are willing to spend more than 500 lei in a public health institution for medical rehabilitation services. Half of the patients who chose to be treated in public health institutions are limited to the included procedures and the remaining 50% are willing to pay up to 500 lei for additional procedures. These results show that the patients who are willing to spend more money if they are indicated additional procedures are those who choose to receive treatment in private health institutions.

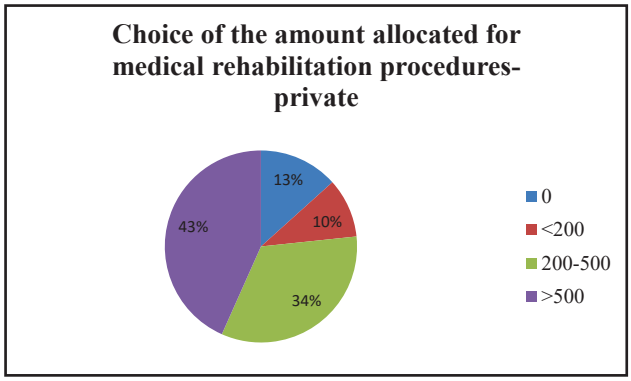


Figure 5. Choice of the amount allocated for medical rehabilitation procedures-private

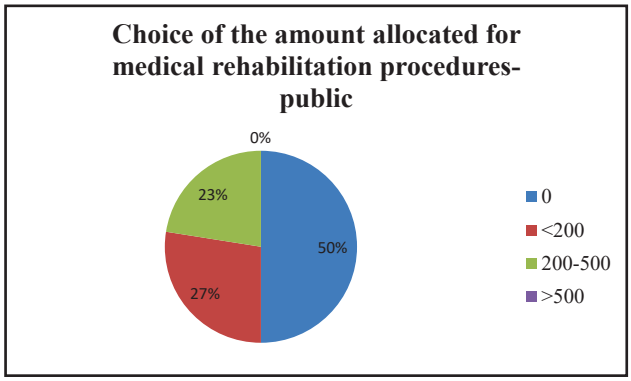


Figure 6. Choice of the amount allocated for medical rehabilitation procedures- public

A lower level of patient satisfaction with the quality of medical services in the private health unit was towards the conditions in the treatment base and comfort during procedures. A percentage of 5% of patients had a good level of satisfaction, 23.33% a very good level, and 71.67% an excellent level of satisfaction with the conditions in the treatment base and comfort during procedures. The percentage increased a lot with other qualities of medical services, 88.33% of patients gave an excellent rating for the attitude of the doctor, medical staff, information about treatment, 10% gave a very good rating and 1.67% a good rating. The level of satisfaction with the attitude of the doctor, medical staff, information about treatment in the public health unit was good for 17.5% of patients, 32.5% rated very good and 50% rated excellent, and with the conditions in the treatment base and comfort during procedures, 40% of patients rated excellent, 42.5% of patients rated very good, 12.5% rated good, and only 5% rated satisfactory. The lower level of satisfaction of patients treated in the public health unit was influenced by the conditions in the treatment base, the attitude of the nurses, the comfort during procedures and the information received about the treatment performed.

In both public and private healthcare units, most patients are not tempted or asked to give money or other consideration to medical staff. Out of 100 patients, 90 patients (90%) were not tempted to offer money or other kind of attention to medical staff, and 98 patients (98%) of patients were not given any hints to offer any kind of attention.

The level of satisfaction for participants in the private health unit was excellent for waiting time to appointment and waiting time between rehabilitation therapies; 76.67% of participants responded “excellent”, 18.33% responded “very good”, 3.33% responded “good”, and 1.67% responded “satisfactory”. The time allocated for consultation was answered “excellent” by 90% of the participants treated in private. For patients treated in the public health care system, a smaller percentage of patients had an excellent satisfaction level for the time allocated to the consultation, 50% answered “excellent”. The same lower percentage was also found for the

waiting time to appointment or waiting time between rehabilitation procedures in the public health unit, with 32.5% of the patients giving "excellent" or "very good", 20% giving "good" and 15% giving "satisfactory". In public health units, waiting times for appointments range from a few weeks to 3-4 months due to high demand and insufficient funds provided by NHIH. The higher number of patients treated in the public health system and the shortage of medical staff explain the increased waiting time between procedures in the public health system.

Patients treated in both health units had a higher percentage of excellent satisfaction with the location of the clinic, opening hours, but related to the ease of appointment and answering the phone, the level of satisfaction was lower among patients treated in the public health unit. Accessibility to medical services in private health units was better than in public ones.

The level of satisfaction for patients in the private health unit towards the tidiness, cleanliness and privacy was excellent in most cases, with a percentage of 81.66%. In the public health unit, for the evaluation of the same facilities, 40% of patients answered "excellent". Only one patient in the private health unit answered "satisfactory" for tidiness and cleanliness, compared to 2 patients in the public health unit. In the public health unit, 2 patients answered "satisfactory" for privacy, and 1 patient rated "unsatisfactory", compared to the private health unit where there were no patients rating "satisfactory" or "unsatisfactory". For medical equipment and sanitary materials, the majority of patients in the private unit had an excellent level of satisfaction, compared to a lower percentage of patients with the same level of satisfaction in the public unit. The lower rating for tidiness, cleanliness in the public health system and for privacy in both health units is due to insufficient space in the clinics as well as the increased number of patients in the treatment base for which increased attention to these aspects is needed.

Approximately 25% of patients treated in the private outpatient unit would like to increase the clinic's space (waiting room, physiotherapy room, changing rooms). A part of patients treated in private outpatient units want new medical rehabilitation therapies. Other aspects to be improved are: hygiene and promptness of telephone calls. Patients treated in public outpatient units are unsatisfied with the existing medical equipment and would like to see it improved, as well as an increase in the number of medical staff. The rest of the complaints or improvements are related to hygiene, comfort during procedures, waiting time for appointments and lack of compliance with appointment times for procedures.

Discussion

More patients from private than public health units participated in this study. In both groups, more of the participants were female. The results assessing patient satisfaction show that patients who were treated in both health units were satisfied with the quality of care they received.

One reason for the high level of satisfaction could be the participation of only adults in this study, with a higher proportion of those over 40, with the peak in the 60-70 age interval. The results of a study in which only older women participated showed increased satisfaction among them (19).

Patients who underwent rehabilitation treatment in the private health unit were more satisfied compared to those treated in public on the quality of medical services, treatment information, accessibility to medical rehabilitation services, waiting time between procedures, medical equipment and sanitary materials. Patient satisfaction is also influenced by non-medical factors such as clinic opening hours, location, parking spaces, when we talk, for example, about the complex rehabilitation programs that are effective in patients with osteoarthritis (20).

In both health institutions, patients responded that they would improve the clinic space, but also the attention to hygiene and privacy.

One possible reason for these differences between private and public health units is that private health units have fewer administrative challenges, and the occurrence of these challenges is resolved by the clinic manager most of the time. Another reason, is the better patient

perception for private medical rehabilitation services. Although both health systems have to coexist, patients' perception of the quality of public healthcare institutions is often negative.

Conclusion

In conclusion, we can say that patients treated in the private healthcare unit had a higher overall satisfaction level. The provision of medical rehabilitation services must necessarily be provided to the highest standards of medical practice.

The government should allocate more money for physical medicine and rehabilitation services, but at the same time solutions must be found to improve the medical activity, patient-physician communication, waiting times.

Narrowing the gap between the quality of public and private healthcare services can be done by stimulating competition and excluding rivalry.

The reliability and validity of the instruments used in this study was not investigated. Future studies using valid instruments may increase the reliability of the results.

One of the limitations of this study is the relatively small number of participants from both health units. A study with a higher number of participants is needed to generalise the results of the study tot the national level.

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