

The level of perceived quality and safety of health services by recipients. Recommendations and interventions for health care policies

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ABSTRACT

In recent years, the importance of the quality in health sector is more and more acknowledged. In broader terms the literature on quality in health care contributed to this, and stressed the importance of meeting the needs of the service recipient. Safety and quality in health care constitute a multi-dimensional parameter and involve many factors and various resources. Safety is positively associated to the quality, as the existence of the one ensures the improvement of the other. Thus, there is a great effort to create a framework, through guidelines and instructions that could contribute to the protection and development of quality and safety. It is important that this framework includes many features that have been expressed as requests by the patients themselves and which can contribute to the development of realistic and effective recommendations for improvement.

Greek reality reveals certain gaps in safety and quality of services delivered, so the main attention has to be focused on developing an integral national health policy; the development of guidelines and the appropriate evaluation of their implementation could be a first effective approach. Formulating an institutional framework about safety and quality in health sector should be incorporated in the culture of all health organizations. To this end, the involvement of health professionals is a vital and strategic point. Health care practitioners should incorporate safety and quality culture in their daily routine and health managers should enact efficient ways of evaluation and control mechanisms in order to achieve better outcomes. Motivation to this direction and active participation should be encouraged with positive approaches, away from any kind of sanction. Any mistakes, adverse effects and deviations should be identified, reported, analyzed and formulate the base of the corrective action. In conclusion, safety and quality in health sector are essential and strongly associated with health services users' satisfaction and quality of life; thus stakeholders and health professionals should focus on these basic conditions in order to achieve the "Health for All" goals in a national, international and universal perspective.

Key Words: Health policy, health services, patients' satisfaction, quality, safety.

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HIGHLIGHTS

- Safety and quality in health care constitute a multi-dimensional parameter in health sector.
- Safety is positively associated to the quality in health services.
- In order to assure safety and enhance the quality of a health organization, the development of guidelines and the appropriate evaluation of their implementation constitute a first effective approach.
- In order to assure better health outcomes, health care practitioners should incorporate safety and quality culture in their daily routine and health managers should enact efficient ways of evaluation and control mechanisms.

INTRODUCTION

In recent years, the importance of the quality in health sector is more and more acknowledged. In broader terms the literature on quality in health care contributed to this, and stressed the importance of meeting the needs of the service recipient. In this context, the quality was evaluated, usually with scales that measure the satisfaction of the patient (Ifantopoulos 2007; Ifantopoulos & Sarris 2001). However, these approaches presented a major problem and this was the lack of a single conceptual framework for quality assessment oriented to the patient satisfaction in order to have comparable results and useful conclusions. It seems that so far the theoretical background and the research conducted mainly reflected the views and beliefs of the researchers rather than the recipients (Raftopoulos 2005).

Thus it is obvious that despite the extensive research

activity, there are still significant gaps that should be addressed. Respectively, the aim of this review is to identify the health systems that present weaknesses in terms of quality and safety and to indicate corrective action.

Fields of quality and safety weaknesses in health systems

In 2010 Eurobarometer published a report on the quality and safety in the EU health systems. The findings of this survey showed significant deficits in both areas. In particular, with regard to the hospital care, a large percentage of patients did not consider the services provided safe, and also reported that during their hospitalization they felt they were at risk, and that was unexpected.

The results of the survey came from 26.663 interviews that were conducted in 27 European Union Member States (EuroBarometer 2010)

Figure 1. How likely do you think it is that patients could be harmed by a) hospital care and b) non-hospital care in our country? (EuroBarometer 2010)

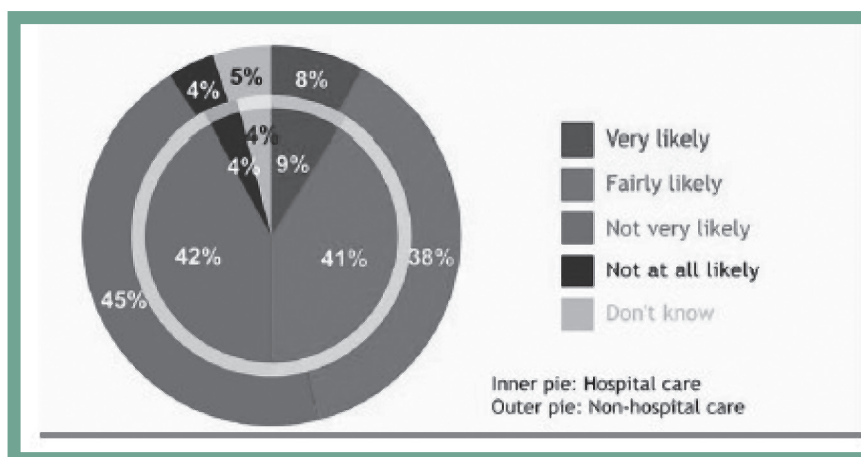





Figure 2. How likely do you think is that patients could be harmed by a) hospital care in our country? and b) by non-hospital care in our country? % EU (EuroBarometer 2010)

	HOSPITAL CARE		NON-HOSPITAL CARE	
	Likely	Not likely	Likely	Not likely
EU27	50%	46%	46%	49%
Sex				
 Male	47%	49%	44%	51%
 Female	53%	43%	48%	47%
Education (End of)				
 15-	49%	46%	44%	50%
16-19	52%	44%	48%	47%
20+	49%	48%	47%	49%
Still studying	45%	48%	45%	48%
Difficulties to pay bills				
Most of the time	60%	35%	56%	39%
From time to time	56%	40%	52%	43%
Almost never	47%	49%	43%	52%

Regardless of whether this belief of the patients is real or not, in hospitalized patients the unsafe is more than those who are not afraid while in external patients are fewer (figure 1). Moreover, the beliefs constitute the safety culture. The core beliefs or assumptions that people share with each other on safety issues are the cognitive and emotional reactions to these problems and in this way they reflect the values they have about this issue (Guldenmund 2000).

By the demographics of those with such perceptions becomes obvious that women, young persons and people with financial difficulties are included (figure 2) (EuroBarometer 2010). Recourse to secondary care is the result of basic structural failures in the health systems under consideration, especially for those without adequate primary health service network.

Characteristically, those who believe that instead of improving their health it will deteriorate in the hospital, they do not generally refer to it, but instead they report specific problems arising during a hospitalization and in particular they report the hospital infections and incorrect or delayed diagnoses (EuroBarometer 2010).

The investigation showed that the hospitals themselves do not endeavor to protect their purpose and their work from a potential error or an unfortunate development that can be considered as an error. A significant proportion of patients, 17%, were never asked to give their written consent to undergo a medical operation, leaving them exposed in case of problems.

Before making reference to the quality problems found in the EU health systems, it is important, given the complexity of the concept, to deal with what the patients

themselves consider it to be. The Eurobarometer survey demonstrated that the patients regard the health quality as the good training of the medical and nursing staff, the implementation of effective treatments, the prompt service, the modern equipment, the respect of their rights, dignity and personality, the assurance that they will not be harm, the right to choose on their own the physician that will treat them, the proximity to the hospital and to the physician and the friendly welcome (EuroBarometer 2010).

The survey also demonstrated that there are major differences between the assessments of the health systems in each country. For example, while the vast majority of Austrians and Belgians consider the health quality of the health systems in their countries good, in countries like Romania and Greece a significant proportion of up to about one quarter, evaluates the quality of the health system of their country as very poor (EuroBarometer 2010).

The data presented in this report, suggest two main conclusions. One is that the weaknesses existed extend to different levels and have multiple origins. For example, the belief that there is a serious possibility of a wrong diagnosis in a hospital may include a degree of truth but a part of it emerges from the misinformation and the lack of proper information of the patients. Furthermore, it appears that there is a lack in complying with the institutional framework as evidenced by the lack of the patient's consent. It should be also noted that there are significant differences among national health systems as there are significant differences between the EU countries.

Figure 3. Criteria of high quality in the sample survey (EuroBarometer 2010)

		Medical staff that is well trained	Treatment that works	No waiting lists to get seen and treated	Respect of a patient's dignity	Modern medical equipment	Free choice of doctor	Proximity of hospital and doctor	Healthcare that keeps you safe from harm	environment at the healthcare facility	Free choice of hospital	A welcoming and friendly environment	DK
EU27		52%	39%	29%	27%	27%	22%	22%	22%	19%	14%	7%	1%
BE		52%	33%	19%	27%	26%	33%	21%	18%	13%	26%	11%	0%
BG		55%	64%	10%	23%	36%	23%	25%	19%	8%	13%	8%	1%
CZ		49%	47%	20%	25%	46%	26%	19%	13%	12%	14%	11%	0%
DK		54%	46%	49%	24%	31%	12%	24%	10%	16%	19%	7%	1%
DE		62%	39%	13%	25%	32%	29%	16%	33%	22%	15%	2%	0%
EE		47%	38%	35%	20%	41%	27%	17%	11%	10%	11%	16%	1%
IE		46%	21%	44%	26%	15%	16%	38%	27%	32%	13%	5%	1%
EL		45%	39%	43%	37%	17%	31%	16%	15%	23%	21%	6%	0%
ES		54%	28%	47%	23%	21%	23%	28%	18%	11%	10%	4%	1%
FR		48%	35%	22%	23%	31%	24%	40%	15%	20%	20%	8%	0%
IT		44%	36%	34%	36%	22%	16%	12%	23%	20%	12%	10%	1%
CY		61%	42%	33%	43%	18%	39%	5%	23%	12%	10%	2%	0%
LV		46%	44%	7%	28%	36%	26%	39%	16%	5%	13%	8%	1%
LT		60%	46%	19%	16%	51%	28%	13%	12%	6%	16%	5%	0%
LU		55%	16%	25%	20%	26%	36%	45%	10%	17%	16%	12%	1%
HU		51%	42%	35%	28%	35%	22%	18%	22%	12%	12%	7%	0%
MT		57%	21%	39%	25%	16%	22%	16%	17%	34%	11%	8%	0%
NL		65%	40%	38%	31%	17%	20%	21%	23%	14%	14%	5%	1%
AT		60%	41%	15%	27%	35%	22%	20%	31%	24%	14%	6%	0%
PL		27%	52%	39%	28%	29%	23%	17%	21%	8%	12%	11%	3%
PT		49%	28%	38%	38%	19%	16%	33%	11%	14%	12%	7%	3%
RO		54%	37%	12%	34%	23%	26%	22%	12%	24%	15%	10%	1%
SI		48%	30%	59%	34%	21%	22%	16%	17%	6%	12%	20%	0%
SK		41%	48%	23%	31%	36%	21%	21%	23%	14%	13%	15%	0%
FI		57%	48%	65%	24%	14%	15%	24%	14%	6%	7%	11%	0%
SE		68%	35%	29%	28%	25%	14%	55%	5%	12%	7%	5%	0%
UK		60%	40%	28%	20%	24%	12%	13%	30%	30%	14%	7%	3%

* In bold, the highest results per country; in italics the lowest results per country; the grey rectangle shows the highest results per value; the rectangle with black borders shows the lowest results per value.

Apart from patients, the issue of safety is of vital importance for health professionals themselves, and particularly for those working in hospitals and deal with more severe cases. A survey conducted by Petrides et al (2013) in a large hospital in Cyprus, showed that the issues of concern of health services practitioners regarding the safety of their own and that of the patients focus on issues such as the recording of adverse events, the management of safety issues, the existing feedback, the way and the methodology followed in the reporting of errors made and the quality assurance.

Recommendations for efficient management of the weaknesses and sustainable development of quality and safety systems in health sector

As concluded by the studies reviewed, safety and quality in health care constitute a multi-dimensional parameter and involve many factors and various resources. Furthermore, the safety positively associated to the quality as the existence of the one ensures the improvement of the other. Thus, apart of the research activity, there is a great effort to create a framework, through guidelines and instructions, that could contribute to the protection and development of

quality and safety. It is important that this framework includes many features that have been expressed as requests by the patients themselves and which can contribute to the development of realistic and effective recommendations for improvement.

Patient safety is primarily determined by the medical and the nursing staff. This means that there should be a corresponding investment in this area. Health care practitioners should be complying with professional commitments in order to provide safe services to patients (Australian Health Minister's Advisory Council 2005).

In order for the patients to feel safe, the behavior of the staff must be guided by respect for the specific characteristics and personality of each patient. The staff should also be informed and trained in relation to the official professional conduct and the patients themselves should be aware of their rights. In addition, both sides should understand that the patients should be aware of and participate in their treatment through consensus and information (Australian Health Minister's Advisory Council 2005).

An example of this mode of action is Italy and the strategy developed to ensure patient safety. In an

attempt to establish culture of safety in healthcare organizations, in Italy training programs and tools have been created. The national distance learning program for patient safety was such a program; physicians and nurses were its target group. This program involved more than 60,000 health professionals and was developed in collaboration with the national medical and nursing organizations. Also, in Italy a report was developed and released; it included an analysis of all the adverse events that occurred in the health sector (Chirardini et al 2009).

For the development of a safety assurance framework, the health systems do not require extreme changes or restructuring, which also is not feasible especially today due to the many challenges faced and the problems created by the economic crisis and the curtailment of resources. Some basic problems can be resolved with systemic effects. One such example is the understanding of the factors that create safety problems as a basis for the efforts to resolve those (Lewis & Fletcher 2005). For instance, if a large proportion of hospital infections is observed in a health system, then the origin of these phenomena must be identified rapidly in order to contain their expansion and for the policy to be developed to take account of this issue.

Another very important step towards this direction is the integration of the safety issue in everyday tasks of the personnel. The safety issues should be included in the evaluation of the daily practice. Of course, this requires the training of the personnel in this direction and the evaluation of their actions, so that the mistakes of the past can become a source of education and training to avoid creating new ones. The establishment of an authority on the subject of safety can be a solution. An authority that will be responsible, not only to control and punish, as in many cases to date, but which will be responsible for the recording and analysis of the mistakes and the problems in relation to safety that occur in the health institutions. The analysis of these errors could be the basis for the preparation of instructions and guidelines to be followed by the staff (Lewis & Fletcher 2005). In order for this authority not to turn into a supervisory and punitive mechanism only, and to actually establish a safety culture, the employees should be encouraged to speak and express themselves freely without fear that they will be punished in the event of an error (Kusek 2012). In this way, the workers that are directly involved with the incidents could directly report an error that has occurred to initiate the correction process, without trying to suppress and to perpetuate in this way an adverse situation because of fear. In this way, the errors already made can constitute a potential feedback for the staff to be trained, while such errors can also

motivate reporting and understanding of the extent of the phenomenon (Raftopoulos et al 2011).

If it is not possible to create an authority at the state level, this role may be assigned to the staff itself. A member of the nursing staff can be designated as the person responsible for the safety with the duty to collect the data and the information around this issue in order to create organized interventions. Of course, the person in charge of the safety should act systematically and, using a valid and reliable method to assess the care and services provided. But it is understood that this process is not possible to be carried out by one person alone without the cooperation of all the staff. A system that can be created without causing problems to the overall operation of the staff is the anonymous reporting of adverse events. This includes the reporting of the misconduct and errors without naming the person responsible for them. In order for this to be feasible a digitized tool is required that would allow all staff members to anonymously report the errors that have been made in any field, or any other incident that if it not address will potentially create health problems to a patient in the future, a visitor or to the employees themselves (Kuczynski et al. 2009). Anonymity is a key feature of this method because it would allow the employees to report such incidents without fear of sanctions solely to improve the practice.

Regarding to quality assurance, the conclusions of its assessment should be used in the formulation of health policies. Assessment in the health sector, organizations and services is based on specific concepts. These concepts because they contain many dimensions and are abstract can be measured in different ways. The choice of the measurement method depends on the research goal (Ifantopoulos & Sarris 2001; Sarris et al 2001). The most important of all and the one being considered first during quality assessment is the concept of efficiency. Efficiency is used to examine whether the available resources are rationally distributed to meet demand and expected productivity (Jin-Li & Yuan-Fu 2004; Ifantopoulos 2006).

Resource efficiency is important because it helps the health care organization to be more effective in key areas such as preventive medicine and recipient services that are beneficial to it and are effective, quality, cost-effective and equally accessible to all (Wardhani et al 2009; Lee et al 2002).

Another concept to which particular importance should be attached is that of equality. However, apart from equal access to care and health services, equality also applies to conditions that affect human health, such as those of living. The existence of equality is documented by the absence of differences in health

indicators between different social and population groups (Cumper 1991).

Equality is governed by the horizontal and vertical dimensions. The horizontal dimension of equality includes the equitable distribution of resources and services and the equal access and use of health services by the whole population. The aim of the horizontal dimension is to reduce inequalities and deviations in geographical and population health indicators. The vertical dimension of equality recognizes that the consumption of services is based on the needs of each person and this means that it is differentiated on a case-by-case basis. This means that funding must also be differentiated and progressive, depending on the financial capacity of each patient (Polyzos 1999).

CONCLUSIONS

In health sector safety and quality have been recognized as factors of importance which affect health care decisively. This article focuses mainly on the issue of safety as quality issues, at least as perceived by the patients themselves, are not easy to be determined and because safety constitutes a key parameter of quality. In this context, the quality of health services can be ensured through an improvement in safety parameters. However reality, characterized by crisis in several socio-economical aspects, threatens safety and quality in health services. Features like modern equipment or choosing a physician convert to

a complex process with a dubious ending. As about Greek health system, which present certain gaps in safety and quality of services delivered, the main attention has to be focused on developing an integral national health policy; the development of guidelines and the appropriate evaluation of their implementation could be a first effective approach. Formulating an institutional framework about safety and quality in health sector should be incorporated in the culture of all health organizations, and particularly hospitals where surgery operations are often carried out and where the patients report the highest uncertainty.

To this end, the involvement of health professionals is a vital and strategic point. Health care practitioners should incorporate safety and quality culture in their daily routine and health managers should enact efficient ways of evaluation and control mechanisms in order to achieve the better outcomes. Motivation to this direction and active participation should be encouraged with positive approaches, away from any kind of sanction. Any mistakes, adverse effects and deviations should be identified, reported, analyzed and formulate the base of corrective action. In conclusion, safety and quality in health sector are essential and strongly associated with health services users' satisfaction and quality of life; thus stakeholders and health professionals should focus on these basic conditions in order to achieve the "Health for All" goals in a national, international and universal perspective.

REFERENCES

- Australian Health Minister's Advisory Council. (2005). National safety priorities in mental health: A national plan for reducing harm. Canberra, Australia, available from: [https://www.health.gov.au/internet/main/publishing.nsf/content/DB6FC7B04519D195CA257BF000217B28/\\$File/safecov.pdf](https://www.health.gov.au/internet/main/publishing.nsf/content/DB6FC7B04519D195CA257BF000217B28/$File/safecov.pdf) [accessed 5/5/2017]
- Cumper G.E. (1991). *The evaluation of national health systems*. Oxford, UK: Oxford Medical Publications
- EuroBarometer. (2010). Patient safety and quality of healthcare. Full report. European Commission, Brussels, Belgium, available from http://ec.europa.eu/commfrontoffice/publicopinion/archives/ebs/ebs_327_en.pdf [accessed 5/5/2017]
- Ghirardini A., Murolo G. & Palumbo F. (2009). The Italian strategy for patient safety. *Clinica Chimica Acta* 404: 12-15.
- Guldenmund F.W. (2000). The nature of safety culture: a review of theory and research. *Safety Science* 34:215-257.
- Jin-Li H., & Yuan-Fu H. (2004). Technical efficiencies in large hospitals: A managerial perspective. *International Journal of Management* 21(4):506.
- Ifantopoulos J. (2006). *Health finances. Theory and politics*. Athens: Print.
- Ifantopoulos, J. (2007) Measuring the quality of life and the European health model. *Archives of Hellenic Medicine* 24 (Suppl. I): 6-18.
- Ifantopoulos J. & Sarris M. (2001). Health related quality of life. Measurement methodology. *Archives of Hellenic Medicine* 18 (3): 218-229.
- Kusek L. (2012). Preventing central line-associated blood stream infections. *J. Nurs Care Qual* 27 (4):283-287.
- Lee S., Choi K. S., Kang H. Y., Cho W., & Chae Y. M. (2002). Assessing the factors influencing continuous quality improvement implementation: experience in Korean hospitals. *International Journal for Quality in Health Care* 14 (5): 383-391.
- Lewis R.Q., Fletcher M. (2005). Implementing a national strategy for patient safety: lessons from the National Health Service in England. *Qual Saf Health Care* 14:135-139.
- Petrides E., Lavranos G. & Raftopoulos V. (2013). Investigation of the safety climate in the pathology and surgery wards of the general hospitals. *Archives of Hellenic Medicine* 30 (4): 449-455.
- Pettker C.M., Thung S.F., Norwits E.R., Buhimschi C.S., Raab C.A., Copel J.A., Kuczynski E., Lockwood C.J. & Funai E.F. (2009). Impact of a comprehensive patient safety strategy on obstetric adverse events. *Am J Obstet Gynecol* 200(5):492.e1-8.
- Polyzos N. (1999). *Hospital efficiency based on patient classification (DRGs)*. Athens: TYPET.
- Raftopoulos V. (2005). A grounded theory for patient's satisfaction with quality of hospital care. *Icus Nurs Web J*. 22:1-15.
- Raftopoulos V., Savva N. & Papadopoulou M. (2011). Safety culture in the maternity units: a census survey using the safety attitudes questionnaire. *BMC Health Services Research* 11: 238-248.
- Sarris M. Soulis S. & Ifantopoulos J. (2001). The theory of social function production. *Archives of Hellenic Medicine* 18 (3):230-238.
- Wardhani V., Utarini A., van Dijk J. P., Post, D., & Groothoff J. W. (2009). Determinants of quality management systems implementation in hospitals. *Health policy* 89 (3): 239-251.