

# Patient Satisfaction and the Right to Health: A Survey in a Rehabilitation Clinic in Switzerland

Emmanuel Kabengele Mpinga<sup>1,3,\*</sup>, Henk Verloo<sup>2</sup> and Philippe Chastonay<sup>3</sup>

<sup>1</sup>Institute of Social and Preventive Medicine, Faculty of Medicine, Geneva University, Switzerland; <sup>2</sup>Applied University of Health Sciences 'La Source', Lausanne, Switzerland; <sup>3</sup>Swiss Public Health School, Zurich, Switzerland

**Abstract:** *Background:* The complex nature of the right to health requires multiple indicators to cover all facets. Patient satisfaction (PS) has been proposed as a possible indicator, but no survey has explored the implementation of this indicator and its utility in promoting the right to health.

*Objectives:* The aim of the present work is to demonstrate the utility of PS as an indicator of the right to health. The objectives of the survey are to identify problems in different domains of the right to health, to analyse possible explanatory factors and to discuss the conditions of the use of PS as a reliable indicator.

*Method:* A retrospective survey using a satisfaction questionnaire was administered to 5,521 hospitalised patients of a rehabilitation clinic in Switzerland between 1 January 2006 and 31 July 2010. A dissatisfaction rate of more than 10% was used as a cut-off point.

*Results:* Some 2,788 patients returned the satisfaction questionnaire, representing 50.4% of the target population. Eighty-nine per cent of the patients expressed general satisfaction. The coordination between intervening healthcare workers (27.2%), the information received (21.5%), the quality of some delivered care (15.1%) and the accessibility to services such as transportation (15.1%) were identified as domains with problems in terms of the right to health and improvements were expected. Satisfaction rates were gender and age dependent as well as related to the length and number of stays within the clinic.

*Conclusion:* PS is an interesting indicator of the right to health as a reliable process. It can be used to complement data provided by other more classical right to health indicators.

**Keywords:** Satisfaction, patient, right, health, monitoring.

## INTRODUCTION

Since the 1970s monitoring human rights indicators has been an important topic for states, international institutions, organizations of the civil society as well as for researchers and professionals working in favour of the promotion and protection of these rights [1-4]. During this period, research first addressed civil laws, policies and democracy [5,6]. More recently, economic, social and cultural rights, as well as indicators of development, have been studied [1, 7-9]. Studies assessed some of the relevant indicators (Freedom House Index, Efficient Democracy Index etc...), and they also helped to identify conceptual, methodological and technical challenges of the realisation of these rights.

In the field of health, the Special Rapporteur on the right to health identified 72 useful indicators relevant to measure the right to health at state levels. The number of ratified international treaties on the right to health, the proportion of urban versus rural populations with access to drinking water, the prevalence of violence against women, the infantile

death rate, and life expectancy at birth have among others been proposed as possible indicators of the right to health [7, 10, 11]. Critical voices have underlined that 18 out of the proposed 72 indicators are not monitored by any of the 194 states and even basic indicators such as maternal mortality rates are monitored by less than half of the states [12].

The complex nature of the right to health, however, paves the way for indicators possibly less robust than infantile death rate, for example, but still able to provide some information useful in strengthening the right to health. Some authors suggest the monitoring of the perception of the population has of fundamental rights violations through well-being or satisfaction questionnaires as a useful approach [2, 13, 14].

The satisfaction of patients is potentially such an indicator. It describes the degree to which health care satisfies the expectations of patients in terms of care techniques, care quantity, physical environment, availability of health professionals, continuity of care, and therapeutic results, etc [15]. Although controversial because of its subjectivity, patient satisfaction has been investigated on a large scale across the world. In spite of its subjectivity it has been reported in the literature that it has a potential effect on the management of health services and on the behaviour of health professionals

\*Address correspondence to this author at the Institute of Social and Preventive Medicine, Faculty of Medicine, Geneva University, Michel-Servet 1, 1211 Geneva 4, Switzerland; Tel: 41 22 379 04 63; Fax: 41 22 379 04 52; E-mail: [Emmanuel.kabengele@unige.ch](mailto:Emmanuel.kabengele@unige.ch)

[16, 17]. In fact, the investigation of patient satisfaction since it integrates the point of view of patients allows to identify to a certain extent problems in the health sector related to the right to health [18] as detailed in General Comment 14/2000 of the Committee of Economic, Social and Cultural Rights of the United Nations [19].

The link between patient satisfaction and the right to health as well as its role in defining health policies has been little studied. A review of the literature has shown that patient satisfaction and the right to health present similarities as far as availability and access to health services and their acceptability and quality are concerned. The same study identifies other similarities of sociologic nature such as patient centred care, of legal nature such as considering patient satisfaction as an indicator of the quality of care and of political nature such as patient participation in evaluating the right to health [20].

Using data from a satisfaction questionnaire addressed to patients of a rehabilitation clinic in Switzerland, the objectives of our study were to identify particular aspects of the right to health perceived as problematic by the patients, to analyse possible explanatory factors and to discuss the usefulness of PS studies in consolidating the right to health.

## METHOD

A cross-sectional survey was performed on patients hospitalised in a rehabilitation clinic in Switzerland between 1 January 2006 and 31 July 2010. Data were collected from patients on the day of discharge. The inclusion criteria were patients admitted at the rehabilitation clinic, independently of the number of admissions during the recruitment period (first, second or more). Patients who had died (0,1%) and those transferred to an acute hospital (1%) were excluded. *The questionnaires were not completed by the proxies.*

After completion, the questionnaires were deposited anonymously in a mail-box or sent by post to the Direction of care of the clinic. Subsequently, the answers to the questions were codified and recorded in a data base (IBM-SPSS 19.0).

Besides socio-demographic characteristics, the questionnaire included 26 items of satisfaction related to:

- care (medical and nursing care, psychological support, dietetics consultation, physiotherapeutic activities, art and music therapy);
- clinic-delivered services (meals, cleanliness of the infrastructure, maintenance of the outside facilities and general hygiene);
- organisational support (welcome, coordination of care activities, information, transportation).

Appreciation of services provided was judged by means of a Likert scale on five levels ranging from 'completely satisfied' to 'completely dissatisfied'. The answers were recoded to two levels of variables: satisfaction (including 'satisfied', 'completely satisfied') and dissatisfaction (including 'completely dissatisfied', 'partially dissatisfied').

Reliability of the instrument was assessed by the intra-class correlation coefficient (ICC) and its 95% confidence interval. The internal consistency of the questionnaire was evaluated using Cronbach's  $\alpha$  coefficient. Cronbach values in the range of 0.81–1.00 indicate 'almost perfect' agreement with 0.61–0.80 indicating 'substantial', 0.41–0.60 'moderate', 0.21–0.40 'fair', 0.00–0.20 'slight' and  $\leq 0.00$  indicates 'poor' agreement [45].

An arbitrary cut-off point of 10% was considered indicative of the existence of problems deserving particular attention.

*Each item was encoded independently by two authors EKM and HV (when there were disagreements, a consensus was obtained through discussion) with specific health rights domains as described by the General Comment 14/2000 19, i.e.*

- Availability of services, infrastructures and health programmes;
- Accessibility of the services and programmes by all without physical and economic discrimination as well the accessibility to information;
- Acceptability that requires that goods, services and other practices of care ethical and respect the culture of individuals or minorities;
- Quality of the care, services and programmes, including the expertise of health professionals as well as diagnostic and therapeutic approaches in conformity with the scientific and medical recommendations of committees of experts.

Descriptive analyses of the socio-demographic data of the studied population were performed. Student-tests and chi-square analyses were used to compare the categories of variables. Significant differences (p-value) between categories or groups of variables were defined at 99%.

## RESULTS

### Characteristics of the Respondents

Of 5,521 patients hospitalised during the period of the survey (1 January 2006 to 31 July 2010), 2,788 patients completed and returned the satisfaction questionnaire (50,4%). The social-demographic characteristics of the target population are synthesised in (Table 1). Note that 60% of the respondents are women and about 50% are between 51 and 80 years of age. Young people (<25ans) represent less than 1% of the population.

About 60% of the patients stayed for more than 20 days in the rehabilitation clinic, the other 40% remaining fewer than 20 days. Within the clinic 64,6% of the responding patients occupied two-bedded rooms and 20% stayed in three-bedded rooms. About 10% had a single room and 5% stayed in a private room.

For more than half of the responding patients (53%) it was the first stay in the rehabilitation clinic; the remaining patients (47%) had stayed already twice or more in the clinic.

Finally, note that 64,3% of the patients were referred to the clinic by their family or specialist physician, one-third (31,7%) being sent by emergency/acute hospitals.

**Table 1. Socio-Demographic Characteristics of Respondents**

Variables	Effectives	%
Gender (n=2762)		
Female	1682	60.9
Male	1080	39.1
Age (n=2742)		
=< 25 years	35	1.3
26 – 50 years	981	35.8
51 – 80 years	1429	52.1
>80 years	297	10.8
Length of hospitalisation (n=2671)		
< 10 days	989	37.0
11–20 days	1528	57.2
> 20 days		
Type of room (n=2701)		
Private room	128	4.7
1-bed room	299	11.1
2-bed room	1746	64.6
3-bed room	528	19.5
Number of stays (n=2644)		
1 <sup>st</sup> stay	1400	53.0
2 <sup>nd</sup> stay	520	19.7
3 <sup>rd</sup> stay or more	724	27.4
Transfer by (n=966)		
Hospital (since 2009)	216	31.7
Family / specialist	438	64.3
Physician	12	1.8
Private clinics	15	2.2
Other		

### Instrument/Questionnaire

The results of internal consistency of the 28-item questionnaire showed an ICC of 0.911 (95% CI: 0.86 to 0.95,  $p < 0.001$ ), and a Cronbach's  $\alpha$  of 0.911.

### General Satisfaction and Identified Problems Regarding the Right to Health

Table 2 presents the satisfaction of the 17 categories of the care delivered as evaluated by the patients during their hospitalisation. Generally, there was a high level of patient satisfaction, around 89%. Most problematic domains were:

- Coordination between the different intervening health professionals during hospitalisation and care was considered as not satisfying by 27% of respondents;
- Information given or received by the patients constitutes the second domain of concerns; it comprises information given by the physician (21, 5% dissatisfied), information on care provided (20,9% dissatisfied) and information in relation to hospital discharge (19,4% dissatisfied);
- The quality of some delivered care was judged insufficient by some respondents; 14,9% were dissatisfied with

the delivery of dietary services and meals, 14,2% with the animation activities, and 11,8% with the lack of attention paid by the nursing staff to acute and chronic pain;

- Accessibility to services was quite often perceived as problematic; 36% of the respondents found that the cost of transportation was too high and 15,1% were dissatisfied with the quality of this service.

### Explanatory Factors of the Perceptions of the Respondents

Generally, there were no statistically significant differences among the respondents concerning their perceptions of the care and services provided.

Analysis of socio-economic characteristics of respondents revealed (Table 3) that:

- With regard to gender, there were non-significant differences between men and women for either item.
- With regard to age, young cohorts ( $= < 50$  years) seemed more dissatisfied than the older ones ( $> 50$  years) in relation to all services included in our analyses (information, coordination, general appreciation, transportation, care services of the physicians;  $p = 0.0001$ );
- The length of stay in the clinic influenced the general appreciation of the hospital stay. Those who stayed up to 10 days were less satisfied than the respondents who stayed more than 10 days.
- The number of stays influenced the satisfaction of the respondents; first-time patients are more dissatisfied than those admitted more than once. For example 20,9% at discharge are dissatisfied with the information given on arrival, as against 14.3% of those who were hospitalised more than once ( $p = 0.038$ ).

### DISCUSSION

Prior to any interpretation of the presented data, two points should be made. First, the right to health does not only concern vulnerable subgroups of the population as some might imagine. The right to health concerns anybody in a society, be it poor or rich. Second, the right to health is not limited to health care. It does include social determinants of health such as access to housing, water and food. Its effectiveness is closely linked to the realization of other basic rights. Our study tried to explore the right to health care as a key component of the right to health.

Our study shows that generally there is a high level of satisfaction among the respondents. Yet the coordination of care, the access to information, the accessibility to and the quality of some delivered services are domains where difficulties and problems were reported.

In the United States, an analysis by the Health Information National Trends Survey of 2008 showed that 70% of respondents found their care to be 'good' to 'excellent' [20, 21]. In Germany, Sweden, Switzerland and Great Britain, a literature review indicated percentages of dissatisfied patients respectively of 6.6%, 7.4% 3.7% 8.5% in studies conducted between 1998 and 2000 [22].

**Table 2. Dissatisfaction Concerning Right to Health**

Variables	Effectives	% dissatisfied	Indicators of right to health: General Observation 14/2000 of the Committee of Economic, Social and Cultural Rights of the United Nations
Costs of transportation	1581	35.9	Accessibility of health care
Coordination of care/services	1959	27.2	Quality of care/services
Information from physician	2365	21.5	Accessibility of information
Information about the care organisation	2536	20.9	Accessibility of information
Information at discharge	2470	19.4	Accessibility of information
Information on arrival	2541	18.1	Accessibility of information
Transportation	2093	15.1	Accessibility of health care
Delivered care of dietetics / kitchen	1898	14.9	Quality of care/services
Delivered care and other activities	1651	14.2	Quality of care/services
Delivered care of physicians	2585	13.3	Quality of care
Delivered care of physiotherapist	2345	12.5	Quality of care/services
Attention by nurses to pain of patients	2452	11.8	Quality of care
Therapeutic education	711	10.0	Quality of care/services

Results of numerous studies conducted in hospital services in different countries support this tendency. In Spain, a survey of 24 public hospitals which questioned 15'539 hospitalised patients and 7'899 ambulatory patients undergoing surgical treatment showed satisfaction rates of 77% and 88,3% respectively 23.

The satisfaction rate in rehabilitation hospital units shows the same tendency. A literature review of studies published in 1990 finds satisfaction rates close to 90%. More than a decade later a survey of 6'205 patients in 134 USA rehabilitation hospitals revealed a satisfaction level of 94% [24, 25].

Considering our results in the light of the rights to health mentioned in the General Comment 14/2000 [19], we can identify three major themes.

- The coordination of care and other services are considered as an important source of dissatisfaction by roughly one-third of the respondents. For 17.2% of Germans, 13.3% of Swiss, 21.9% of British and 21.7% of Americans coordination of care services is perceived as a key problem in their respective countries [22]. In a recent American survey of 2268 women suffering from breast cancer, 16.4% consider the coordination of care to be inadequate [26]. In the context of the Swiss healthcare system, which is of decentralised nature, reimbursement of delivered cares, the freedom of choice of health professionals and the absence of specific control measures do not favour efficient coordination and the continuity of care offered by healthcare providers [27, 28]. Other elements concerning the quality of care were reported by the respondents, such as inappropriate care provided by physicians or the lack of attention given by nurses to the pain of the patients, which are regularly documented in the literature [11, 20, 23].

- Second was the lack of information in the clinic about the hospitalisation, the stay and the discharge of patients. It should be recalled that the domain of information is the one where several studies describe patients' concerns. A French survey assessing patient satisfaction with regard to information received before or during a complementary medical examination notes that 20% of the participants had not received any specific medical or paramedical information before the examination and 4% had received no information at all [29]. In other countries, 20.4% of Germans; 23.4% of Swedes, 16.7% of Swiss, 28.7% of British and 25.2% of Americans were dissatisfied with the information they had received [22]. In the Netherlands, 58% of patients with cardiovascular problems indicated that they had received no information from the pharmacist [30]. Despite the satisfaction rate of 86.8% among clients of different healthcare organisations in several Swiss cantons, only 66.8% of the clients judged the information delivered by the home health services as sufficient regarding possible financial support [31]. Some analysts note that the lack of information and the difficulties of communication in the Swiss healthcare system are difficult to overcome. Sharing of clinical information between professionals working in hospitals and ambulatory care settings seem to be limited [28].
- The third domain of the right to health relates to problems of accessibility to care services as described in the General Comment 14: facilities, goods and services should be accessible without discrimination to all persons [10]. This right is analysed through physical, geographical, economic and cultural components (acceptability). About 36% of the respondents were dissatisfied with transportation costs. For more than 80% of hospitalised patients, transportation is organised via a private

**Table 3. Patient Satisfaction: Socio-Demographic Variables and Features of the Rehabilitation Clinic (N=2'132). \* (P-Value < 0.001)**

Domain	Satisfied (%)	Dissatisfied (%)	P-value					Year	
			Gender	Age	Duration of stay	Type of room	Number of stays		Service of stay
<b>Gender</b>			-		0,345	0,104	0,258	0,259	0,950
<b>Men</b>	931 (89.7% /	107 (10.3%)	0.560	0,560	< 0.000*	0.011	0.145	0.006	<
<b>Women</b>	1440 (88.8%)	/181 (11.2%)							<b>0.000*</b>
<b>(p=0.488)</b>	838 (84.6%)	153 (15.4%)							
<b>Age</b>	1524 (92.3%)	127 (7.7%)							
<b>-50</b>									
<b>+50</b>									
<b>(p=&lt; 0.000)*</b>									
<b>Duration of stay</b>			0.345	< 0.000*	-	0.005	0.011	0.520	0.046
<b>-10 days</b>	120 (81.6%)	27(18.4%)							
<b>+ 10 days</b>	2186 (89.8%)	248 (10.2%)							
<b>(p=0.002)</b>									
<b>Type of room</b>			0.104	0.011	0.005	-	< 0.000*	< 0.000*	0.072
<b>private</b>	108 (89.3%)	13 (10.7%)							
<b>1 bed</b>	258 (88.1%)	35 (11.9%)							
<b>2 beds</b>	1516 (90.1%)	167 (9.9%)							
<b>3 beds</b>	457 (88.7%)	58 (11.3%)							
<b>(p=0,665)</b>									
<b>Numbers of stay</b>			0.258	0.145	0.011	< 0.000*	-	0.017	0.017
<b>1<sup>er</sup> stay</b>	1229 (90.3%)	132 (9.7%)							
<b>=&gt;2 stay</b>	1061 (88.6%)	137 (11.4%)							
<b>(p=0.153)</b>									
<b>Service of stay</b>			0.259	0.006	0.520	< 0.000*	0.017	-	0.218
<b>Year</b>									-
Information physician (n=1790)	1406 (78.5)	384 (21.5)	0.550	0.047	0.620	0.089	< 0.000*	0.197	0.635
Quality of transport (n=1607)	1360 (84.6)	247 (15.4)	0.750	0.016	0.140	0.696	0.141	0.733	0.044
Cost of transport (n=1581)	1014 (64.1)	567 (35.9)	0.289	< 0.000*	< 0.000*	0.212	0.107	0.526	0.631
Identification personnel (n=1960)	1779 (90.8)	181 (9.2)	0.168	0.238	0.357	0.408	0.475	0.802	0.003
Quality of care nurses (n=2027)	1847 (91.1)	180 (8.9)	0.145	< 0.000*	0.129	0.557	0.028	0.137	0.116
Attention nurses to pain (n=1899)	1694 (89.2)	205 (10.8)	0.135	< 0.000*	0.124	0.614	0.168	0.159	0.751
Delivered care physicians (n=1948)	1694 (87.0)	254 (13.0)	0.874	< 0.000*	0.018	0.450	0.007	0.109	0.144
Delivered care dietetics (n=1429)	1203 (84.2)	226 (15.8)	0.417	0.007	0.996	0.316	0.205	0.267	0.056
Delivered care physiotherapist (n=1782)	1558 (87.4)	224 (12.6)	0.410	0.004	0.458	0.305	0.434	0.560	0.450

(Table 3) contd....

Domain	Satisfied (%)	Dissatisfied (%)	P-value						Year
			Gender	Age	Duration of stay	Type of room	Number of stays	Service of stay	
Delivered care animation activities (n=1227)	1055 (86.0)	172 (14.0)	0.211	0.156	0.499	0.749	0.742	0.711	0.544
Delivered care art therapy (n=630)	571 (90.6)	59 (9.4)	0.816	0.035	0.162	0.634	0.838	0.938	0.538
Coordination (n=1482)	1063 (71.7)	419 (28.3)	0.917	< 0.000*	0.051	0.217	0.797	0.360	0.354
General Information arrival (n=1916)	1547 (80.7)	369 (19.3)	0.934	< 0.000*	0.038	0.849	0.003	0.016	< 0.000*
Information about care organisation during stay (n=1929)	1501 (77.8)	428 (22.2)	0.962	< 0.000*	0.001	0.628	0.016	0.261	0.001
Information discharge (n=1902)	1514 (79.6)	388 (20.4)	0.526	0.003	0.002	0.132	0.012	0.507	0.006
Quality of meals (n=2061)	1761 (85.4)	300 (14.6)	0.900	0.041	0.162	0.162	0.415	0.478	0.013
General appreciation hospital stay (n=2037)	1806 (88.7)	231 (11.3)	0.693	< 0.000*	< 0.000*	0.326	0.510	0.220	< 0.000*

company that transports the patients four times per week at a cost of 100 CHF. Given that health insurance only reimburses half of these transportation expenses in the case of illness, the dissatisfaction demonstrated by more than a third of respondents is understandable.

Although in Switzerland the population has access to a large palette of healthcare services - high technological services based on evidence-based medicine and patients are generally satisfied with the care received [32], it is none the less true that in this domain some real problems exist. These problems concern treatment differences on covering health expenses, as the social inequalities in the health system cannot be ignored. The average cost of the basic health insurance for an adult was 212 CHF in 2000 and reached 351 CHF in 2008 (+65%), forcing numerous people to resort to cantonal subsidies to ensure their health care was covered [33]. Within the Swiss canton Wallis - a relatively poor mountain state - the number of recipients of such subsidies rose from 66958 in 1996 to 96612 in 2008, an increase of 44.2% [34]. Another demonstration of the inaccessibility of healthcare services results in the renunciation to care by people with a low income. A survey in the canton of Geneva among 765 men and 814 women found that more than 30% of the respondents with a low income stopped paying healthcare insurance for economic reasons the year preceding the investigation [35]. Beyond the financial question, the cultural and in particular the linguistic barriers (*lack of information*) might not limit access to healthcare services but

make the interaction between patients and healthcare providers difficult and in some cases impossible. Several studies documented the impact of linguistic barriers on the quality of care. 'Where there are language barriers, patient-provider communication tends to be less successful, patient satisfaction is reduced and provider dissatisfaction is increased', as Bischoff and Denhaeryncks observed [36]. Other effects of linguistic and cultural barriers seem to be the overconsumption of care, multiple undesirable effects and financial costs attributable to the use of interpreters [37]. With 20.3% of the population and 37.4% of healthcare staff being foreign [38, 39], Switzerland does face such challenges.

The availability of healthcare services in Switzerland seems sufficient to absorb the demand of the population. With 3,8 physicians and 14,9 nurses per 1,000 inhabitants, Switzerland is extremely well provided compared with OECD countries with an average of 3,2 physicians and 9,0 nurses per 1,000 inhabitants [28]. In a historic perspective, the availability of healthcare services, particularly those of physicians, increased by 214% between 1970 and 2010 whereas during the same period the population only increased by 24%. The availability of healthcare services cannot be assessed only by the indicator of medical density, however. It also requires the analysis of the catalogue of healthcare services covered by an insurance system. Data of Beske and Oggier situate Switzerland above the average of the 14 OECD countries with an 108 index against an international average of 100 [40]. However, inequalities persist re-

garding the offer and availability of services, between the urban and the rural cantons, between academic and non-academic cantons, between the regions of the mountains and those of the valleys. These inequalities deserve to be studied and should be taken into account in healthcare policies.

The explanatory factors of patient satisfaction are numerous and complex. For some, the general care environment determines satisfaction, whereas for others the social and demographic features of the respondents or even their personalities are determinants. In Germany, a data analysis of the satisfaction of 120825 hospitalised patients between 1997 and 2004 in seven hospitals found that general satisfaction was mainly determined by the general environment of the hospital [41]. In contrast, a survey of 237 discharged patients of the Academic Medical Centre of Amsterdam examined the association between five dimensions of the respondents' personality (Extraversion, Agreeableness, Conscientiousness, Emotional Stability and Autonomy) and their satisfaction. The survey concluded that 'patient satisfaction seems only marginally associated with personality' [42]. In spite of some contradictions, it is generally admitted that socio-demographic characteristics of patients constitute a powerful predictor of their satisfaction. Numerous studies show that patient satisfaction increases with age regardless of the healthcare structure, and that the gender of patients appears to influence their satisfaction less [43, 44].

Our survey demonstrated that patient satisfaction constituted one of the indicators of the right to health. The perceptions of the quality of care by helped to identify the domains of care organisation requiring greater attention from decision-makers. As in all investigations of satisfaction, however, our survey has specific limitations. First, the absence of a longitudinal perspective does not permit a follow-up of the changes in these opinions and their evolution over time. The second limitation is the failure to take into account patient pathology as a discriminative factor of satisfaction. It is well documented that patients' satisfaction varies according to the pathologies they have and the care units in which they stay. A Swedish survey by Rahmqvist found that general satisfaction with care was higher in paediatric and gynaecology units whereas the lowest scores were recorded in psychiatry and in internal medicine [44]. A third limitation relates to the fact that one specific institution was studied, a rehabilitation hospital. The identified problems might therefore be specifically related to that institution, though they might also be common to the health system in general (lack of coordination, lack of information, high costs, etc.)

In the context of the development of indicators of the right to health in healthcare settings, studies of patients' satisfaction offer interesting perspectives:

- The necessity for the UN Committee on Economic, Social and Cultural Rights to formulate recommendations to States regarding the opinions and perceptions of the population on the effectiveness of the right to health legislation;
- The periodic legal obligation and organisation by States of national investigations on the perception of the population on this right and the integration of the results into the national report addressed to the UN Committee on Economic, Social and Cultural Rights;

Such actions, however, would imply the development of a legal framework that clarifies the objectives pursued by such studies, the responsibilities of service providers in data collection, a large consensus of the population on the importance of such investigations and technical preparation of adapted tools for data collection.

## CONCLUSION

Our survey looked at indicators of the right to health in a healthcare setting using data of satisfaction of hospitalised patients in a rehabilitation clinic.

The obtained results underline the importance of care coordination, access to information, accessibility to services and the quality of care per se, all of which are topics of concern to patients.

Patients' satisfaction offers to the Committee of Economic, Social and Cultural rights an excellent opportunity to check the right to health in health care settings. It should be considered as a natural indicator of the effectiveness of the implementation of this right. It is a ready-to-use tool.

## CONFLICT OF INTEREST

The author(s) confirm that this article content has no conflicts of interest.

## ACKNOWLEDGEMENT

Declared none.

## ETHICAL CONSIDERATIONS

Authorisation for this study was obtained from the managers and ethical committee of the clinic. All respondents participated voluntarily in this survey and were free to withdraw without having to give reasons and without compromising the medical follow-up. All collected data were treated as confidential, anonymous and kept under lock and key.

## REFERENCES

- [1] Fukuda-Parr S, Lawson-Remer T, Randolph S. Measuring the progressive realization of human rights obligations: an index of economic and social rights fulfilment. Economic Rights Working Paper Series 2008, Working Paper n° 8, Human Rights Institute. University of Connecticut, Storrs 2008.
- [2] Barsh LR. Measuring human rights. Problems of methodology and purpose. Hum Rights Quarter 1993; 15(1): 87-121.
- [3] Robert M, Jurine M. Les Indicateurs droits de l'homme et démocratie : définition et implications. Note à l'attention du Parlement Européen Bruxelles: Union Européenne 2006.
- [4] Landman T, Carvalho E. Measuring human rights, New York: Taylor & Francis 2009.
- [5] Stohl M, Carleton D, Lopez G. State violation of human rights: Issues and problems of measurement. Hum Rights Quarter 1986; 8(4): 592-606.
- [6] Bollen KA. Political democracy: conceptual and measurement traps. Stud Comp Int Dev 1990; 25(1): 7-24.
- [7] Hunt P, Backman G. Health systems and the right to the highest attainable standard of health. Heal Hum Rights 2008; 10(1): 81-92.
- [8] Fukuda-Parr S. Indicators of human development and human rights- overlaps, differences... and what about human development index. Stat J United Nat Econ Comm Eur 2001; 18(2-3): 239-48.
- [9] Green M. What we talk about when we talk about indicators: current approaches to human rights measurement. Hum Rights Quarter 2001; 23(4): 1062-97.

- [10] United Nations. The right of everyone to enjoy the highest attainable standard of physical and mental health. Rep Gen Assem 2003; A/58/427: 18 October 2003.
- [11] Backman G, Hunt P. Health systems and the right to health: an assessment of 194 countries. *Lancet* 2008; 372: 2047-85.
- [12] Smith R. On the right to health; 15 December 2008. BMJ Groups Blogs. [Accessed on 15 May 2012].
- [13] Davenport C, Armstrong II. D.A. Democracy and the violation of human rights: a statistical analysis from 1976 to 1996. *Am J Polit Sci* 2004; 48(3): 538-54.
- [14] Linde J, Ekman J. Satisfaction with democracy: a note on a frequently used indicator in comparative politics. *Eur J Polit Res* 2003; 42: 391-408.
- [15] Mrayyan M. Jordanian nurses' job satisfaction, patients' satisfaction and quality of nursing care. *Int Nurs Rev* 2006; 53: 224-30.
- [16] Barr JK, Tierney EG, Sofaer S. Using public reports of patient satisfaction for hospital quality improvement. *Health Res Educ Trust* 2006; 41(3): 663-82.
- [17] Grecco M, Brownlea A, McGovern J. Impact of patient feedback on the interpersonal skills of general practice registrars. Results of a longitudinal study. *Med Educ* 2001; 35: 748-56.
- [18] Williams B. Patient satisfaction: a valid concept. *Soc Sci Med* 1994; 38(4):509-16.
- [19] Conseil Economique et Social des Nations Unies. Le droit au meilleur état de santé susceptible d'être atteint. Observation générale 14 du Comité des droits économiques, sociaux et culturels E7C 12/2000/4 du 11 août 2000
- [20] Mpinga EK, Chastonay P. Patient satisfaction studies and the monitoring of the right to health: some thoughts based on a review of the literature. *Global J Health Sci* 2011; 3(1): 64-9.
- [21] Chou WY, Wang LC, Finney R, *et al.* Factors associated with Americans' ratings of health care quality: what do they tell us about the raters and the health care system? *Health Commun* 2010; 15 (suppl 3):147-56.
- [22] Coulter A, Cleary DP. Patients' experiences with hospital care in five countries. *Health Affairs* 2001; 20(3): 244-52.
- [23] Mira JJ, Tomas O, Virtudes-Perez M, *et al.* Predictors of patient satisfaction in surgery. *Surgery* 2009; 145 (5): 536-41.
- [24] Keith AR. Patient satisfaction and rehabilitation services. *Arch Phys Med Rehabil* 1998; 79:1112-8.
- [25] Tooth LR, Ottenbacher KJ, Smith PM, *et al.* Satisfaction with medical rehabilitation after spinal cord Injury. *Spine* 2004; 29(2): 211-9
- [26] Hawley ST, Janz K, Lillie SE, *et al.* Perceptions of care coordination in population-based sample of diverse breast cancer. *Patient Educ Couns* 2010; 81 Suppl: s34-40.
- [27] Wyss K, Lorenz N. Decentralization and central and regional coordination of health services: the case of Switzerland. *Int J Health Plann Mgmt* 2000; 15:102-14.
- [28] OECDE- WHO. OECD Reviews of Health Systems: Switzerland. OECD Publications, Paris, 2006, p.190.
- [29] Florence S, Gambotti L, Tézenas du Montcel S, *et al.* La perception des patients de l'information reçue lors d'un examen médical complémentaire. *Santé Publique* 2009; 21 (1) :37-44.
- [30] Van Geffen EC, Philbert D, Van Boheemen C, *et al.* Patients' satisfaction with information and experiences with counselling on cardiovascular medication received at the pharmacy. *Patient Educ Couns* 2011.
- [31] Gmür R, Rüfenacht M. Aide et soins à domicile In *Système de santé Suisse 2007-2009 : survol de la situation actuelle*, Hans Huber, Berne 2010.
- [32] Confédération Helvétique. Deuxième et troisième rapports de la Suisse sur la mise en œuvre du Pacte international relatif aux droits économiques, sociaux et culturels (Pacte I de l'ONU) au Comité des droits économiques, sociaux et culturels, Berne Avril 2008; p.155.
- [33] OFSP. Statistique de l'assurance maladie obligatoire 2008. OFSP-DFI, Berne 2009; p. 247.
- [34] Département des finances, des institutions et de la santé du Valais. Subventionnement des primes d'assurance-maladie 2010 en Valais, Point de presse du 19 novembre 2009.
- [35] Wolff H, Gaspoz JM, Guessous I. Health care renunciation for economic reasons in Switzerland. *Swiss Med Wkly* 2011; 141: w1316.
- [36] Bischoff A, Denhaerynck K. What do language barriers cost? An exploratory study among asylum seekers in Switzerland. *BMC Health Serv Res* 2010; 10: 28.
- [37] Scheppers E, VanDongen E, Dekker J, *et al.* Potential barriers to the use of health services among ethnic minorities: a review. *Fam Practi* 2006; 23: 325-48.
- [38] Office fédéral de la statistique. Variation de la population étrangère permanente de 2000 à 2009. [www.atlas.bfs.admin.ch](http://www.atlas.bfs.admin.ch) [Accessed on June 30 2011].
- [39] Huber K, Mariéthoz E. Recherche qualitative sur le personnel de santé étranger en Suisse et sur son recrutement. Conférence Suisse des directeurs cantonaux de la santé, Berne 2010 ; p. 48.
- [40] Oggier W. Comparaisons internationales, In : Gmür R, Rüfenacht M. Eds. *Système de santé Suisse 2007-2009 : survol de la situation actuelle*, Hans Huber, Berne 2010; pp. 95-106.
- [41] Haase I, Lehnert-Batar A, Schupp W, Gerling J, Kladny B. Factors contributing to patient satisfaction with medical rehabilitation in German hospitals. *Int J Rehab Res* 2006; 29(4): 289-94.
- [42] Hendriks AAJ, Smets EMA, Vrieling MR. Is personality a determinant of patient satisfaction with hospital care. *Int J Quality Health Care* 2006; 18(2): 152-8.
- [43] Dennis JS. Satisfaction with medical care among elderly patients. *J Hosp Market Public Rel* 2008; 15(2): 3-32.
- [44] Rahmqvist, M. Patient satisfaction in relation to age, health status and other background factors: a model for comparison of care units. *Int J Quality Health Care* 2001; 13(5): 385-90.
- [45] Hair JF, Black WC, Babin BJ, Anderson RE. *Multivariate data analysis: a global perspective*, 7<sup>th</sup> ed. Pearson Global Editions, New Jersey 2010.

Received: June 18, 2013

Revised: September 23, 2013

Accepted: September 25, 2013

© Mpinga *et al.*; Licensee Bentham Open.

This is an open access article licensed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/3.0/>) which permits unrestricted, non-commercial use, distribution and reproduction in any medium, provided the work is properly cited.