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Empirical Work up for Conception and Impacts of Hospital Stakeholder Management[1]

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*A*bstract:

Background. Stakeholders are defined as persons, groups or organizations that affect or can be affected by organization's or company's activities. The power and influence is dependent on the rights, possibilities and importance of the stakeholder. This resolves in a sophisticated stakeholder relationship management (SRM). In hospital management SRM can hardly be found. Aim of the study was to characterize hospital stakeholders with respect to their influence and attitude towards a hospital. Further, a model for comprehensible SRM is designed.

Methods. An eight-person expert panel analyzed the hospital stakeholder environment by using a bi-dimensional matrix. The focus was on the stakeholder attitude towards the hospital and its influence. Potential sceneries regarding changes in stakeholders' attitude and influence were considered with respect to consequences in their management.

Results. 22 stakeholders were identified and classified into eight groups. Patients, employees, external authorities and hospital owner where recognized as the top stakeholders. Potential conflicts of interest between these groups are visualized in a graphical matrix.

[1] The authors declare that they have no competing interests.

Conclusion. SRM might be of great advantage in terms of competition in the health care market. This approach offers potentials to implement SRM in strategic considerations and decisions making processes. Further studies are needed.

Keywords: Hospital management; Stakeholder management; Stakeholder relationship management

JEL Classifications: I15, H42, A19

1. Background

Stakeholders are defined as various persons, groups or organizations that are interacting with a company or institution in their professional, economical, legal or social environment. The different groups of stakeholders are characterized by their demands, rights and possibilities to act in this context with a more or less important impact on the company's strategy and wealth, Keele, *et al*. (1987). The different interactions can be systematically investigated and evaluated from a company's point of view. The aim of this analysis is to stratify the stakeholders regarding their importance, influence, and complaisant attitude towards the company as well as their potential negative impact in case of discontent which allows a classification and prioritization of stakeholders, Rosenstock, *et al.* (1998). Consecutively, the relevant stakeholders can be identified and special attention can be paid to the interaction with them and to their interests. In the economy this process of stakeholder relationship management (SRM) is well established and is not only performed internally, but also an important topic in the external presentation of various big companies, http://www.sapintegratedreport.com/2013/de/sap-im-kontext/dialog-mitstakeholdern.html, https://www.basf.com/en/company/sustainability/responsible-partnering/networks.html,

which implies that financial and human resources are provided for this field to achieve and maintain successful and long-lasting beneficial stakeholder relations. Furthermore, in the economy, national guidelines such as the German Corporate Governance Codex, http://www.dcgk.de/de/, have been defined, that commit the management to lead a company according to the stakeholders' interests with the aim of sustainable value creation. Although not legally binding, these guidelines have been widely adopted and accepted. The process of SRM in the economic context comprises five key steps, Savage, *et al.* (1991):

- identifying stakeholders
- acquiring information on the expectations of the stakeholders
- deciding on suitable measures to meet these expectations with considerations on the efficacy of these measures
- controlling important stakeholders with regard to the company's aims
- supervising shifts within the stakeholder groups with regard to influence and attitude towards the company

Regarding hospital management, the process of SRM is not commonly used yet despite a comparable situation with various different groups interacting with the hospital with different interests. However, in comparison to companies, the groups of stakeholders in the healthcare environment seem to be different and potentially more complex. Special topics that exceed economic well-being of a hospital have to be respected, especially in terms of legal and ethical aspects associated with the provision of medical care.

Aim of the study was to characterize stakeholders in hospital with regard to their influence, power, dependency as well as attitude towards a hospital and design a model for successful SRM in this setting.

2. Methods

An eight-person expert panel consisted of physicians, an economist, controllers, patient and logistic managers as well as a healthcare consultant to broadly cover the variety of the professional groups that are mainly involved in the aspects of hospital management. An academic hospital of the highest level of medical care was chosen as the model with the potentially most complex stakeholder interactions. A three-step approach was applied to meet the requirements of the study aim. In the first step, a definition and identification of all stakeholders involved in the hospital environment was performed and the single defined stakeholders were grouped according to common fields of interests. The stakeholder groups were categorized with regard to their localization, strength as direction of influence as well as the grade of influenceability (Figure 1). This served as the basis for the second step with positioning of the stakeholder groups into a bi-dimensional matrix. This matrix was adopted from economic studies, Mitchell, *et al.* (1997) and consisted of an established four-level stratification of stakeholders according to their strength of influence and attitude towards the hospital:

Great influence, complaisant attitude (key stakeholders),

Great influence, averse or antipathetic attitude (critical stakeholders),

Low influence, complaisant attitude (stakeholders with potential)

Low influence, averse attitude (potentially critical stakeholders to observe)

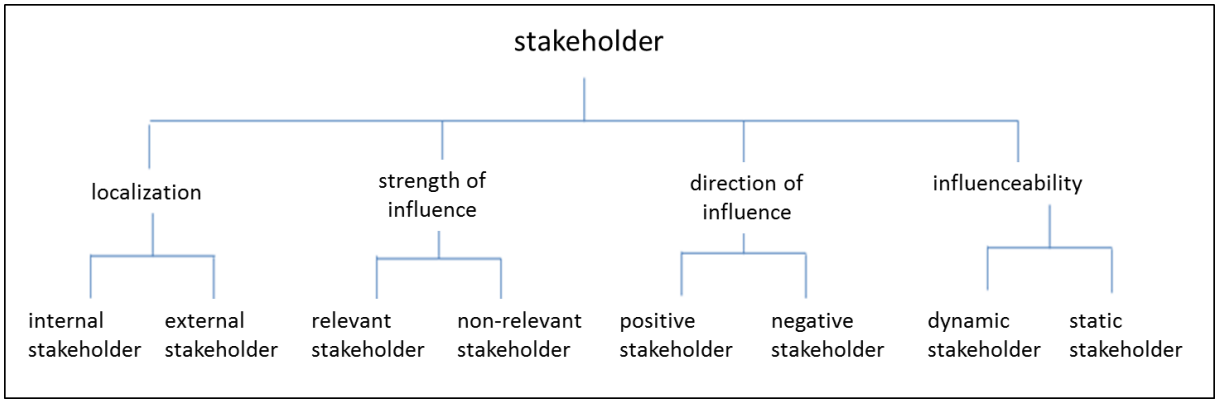

Figure 1. Scheme of stakeholder categorization according to localization, strength and direction of influence as well as influenceability

To categorize the stakeholder groups, both parameters (influence, attitude) were evaluated with a graded scale (1: little influence / averse attitude; 2: medium influence / neutral attitude; and 3: great influence / positive attitude) and both values plotted in a 4-field matrix for graphical visualization.

In the third step, the three most important key stakeholders were selected from the groups and potential sceneries regarding changes in stakeholders' attitude and influence were analyzed. This was performed with regard to their assignment within the four-level stratification (key and critical stakeholders, stakeholders with potential and to observe), consecutive consequences for their management and examples for daily practice.

3. Results

After regarding all fields of activity with regard to medical, social and economic aspects, a total number of 22 stakeholders were identified inside the hospital, in the socio-economic context and with regard to the academic and legal authorities. The different stakeholders were classified into eight cluster according to their potentially similar interests. The groups were defined as patient-related, employee-related, medical partners, economic partners (suppliers of medical and non-medical products, service suppliers), authorities (legal, medical, academic), financing institutions, healthcare cost providers and social environment. The identification and grouping was primarily performed without any prioritization. Table 1 summarizes the defined stakeholders and groups.

Table 1. Identified stakeholders and stakeholder groups according to the potential fields of interest

Stakeholders	Stakeholder groups
patients	patient-related
relatives & friends of patients	
patients' organizations	
employees (medical, paramedical, students)	employee-related
admitting physicians	admittance-related
other hospitals	
paramedics	
providers of medical products	provider-related
providers of non-medical products	
providers of medical services	
providers of non-medical services	
medical and scientific authorities / societies	authority-related
legal authorities	
healthcare insurances	healthcare-cost calculation related
hospital societies	
DRG-related societies	
banks / financing institutions	economy-related
hospital sponsor	
donors	
politics	publicity-related
public	
media	

The semi-quantitative evaluation of influence and attitude according to the three-level scale revealed patient- and employee-related stakeholders as well as suppliers of medical products as the key stakeholders, mainly due to their high level of influence and the dependency of the hospital on their positive attitude. Figure 2 on the next page shows the bi-dimensional graphical visualization in a four-field matrix.

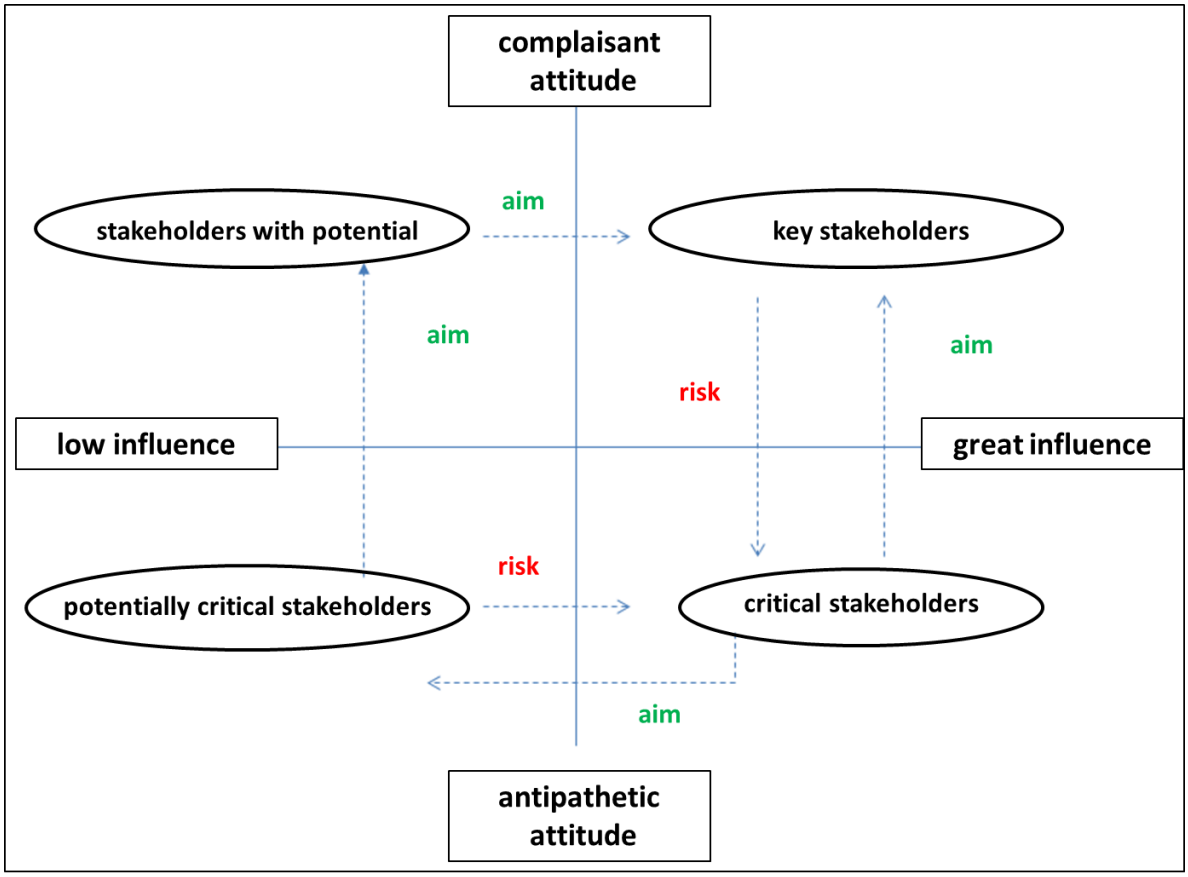

Figure 2. Bi-dimensional matrix for stakeholder stratification. The broken arrows show potential changes of specific stakeholders within the matrix, which implies desirable movements (aims) and movements that should be avoided (risks).

The assumed scenery for the three most important stakeholders was visualized in the bi-dimensional matrix and revealed that the matrix is a suitable tool for the projection of the possible shifts to be monitored. With the two parameters influence and attitude, the dynamic changes were characterized by growing influence with increasing positive attitude as a desirable movement (positive impact, aim) and growing influence with increasing negative attitude (negative impact, risk) as a movement to be avoided. Decreasing influence with either attitude was regarded as a feature to be observed as the consequences for management decisions seem to be limited. Figure 3 on the next page shows the possibilities of the dynamic shifts for the three chosen major stakeholders. Furthermore, the potential conflicts of interests between these stakeholders were analyzed using this matrix and practical examples for decisions were defined. They were identified mainly as conflicts based on the interference of providing best care for patients which implies the use of high-quality products and a sufficient number of qualified and motivated employees and the interests of cost-saving processes which implies a best-price policy contradicting the interests of medical product providers and the unlimited provision of human resources in all fields of hospital care as these two items are the main cost drivers and therefore provide conflicts of interest with a number of other stakeholders, especially regarding health care cost providers and financing institutions.

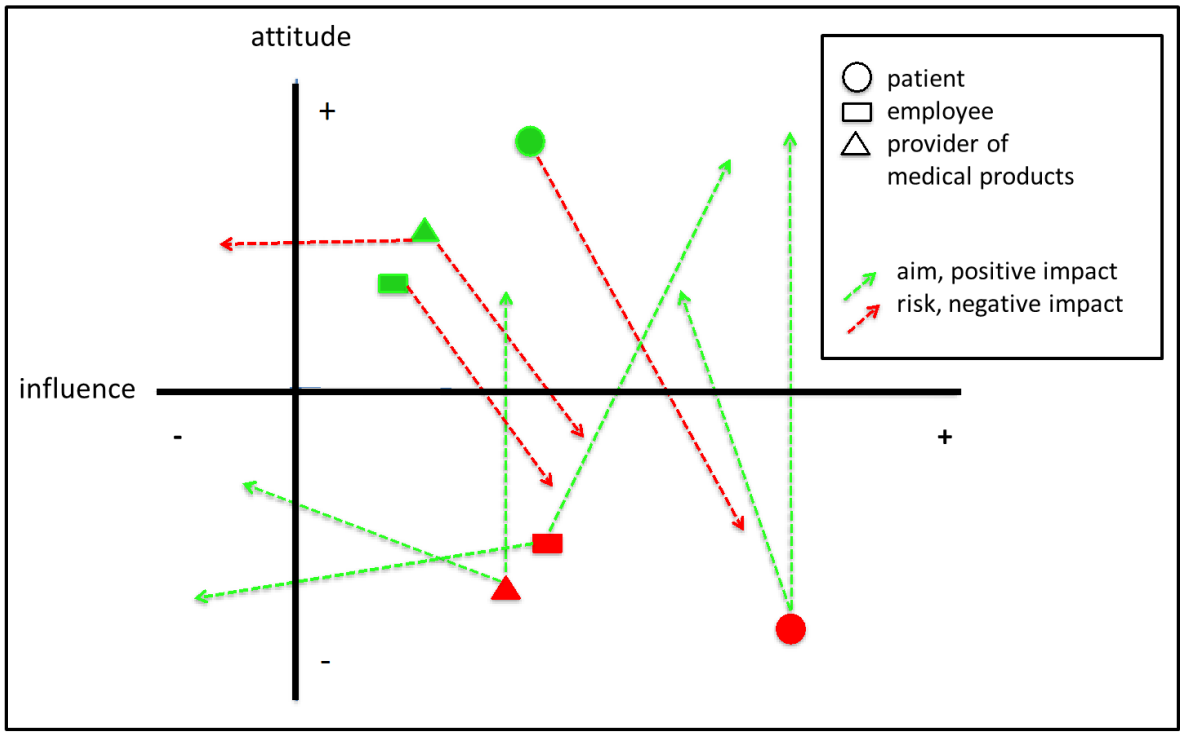

Figure 3. Projection of possible changes in stakeholders‘ impact shown for three selected key stakeholders. Right upper quadrant showing the desirable position of the key stakeholders with possible directions of movements in the four field matrix: red broken arrows depicting risky developments, green broken arrows depicting changes that should be achieved by successful SRM.

4. Discussion

Hospitals, like other institutions and companies, have to fulfill the expectations of numerous groups of people, institutions and authorities, Keele, *et al*. (1987), Savage, *et al.* (1991), Mitchell, *et al*. 1997), Cavazza, *et al*. (2012), Lawrence, *et al*. (2009). Currently, this is mainly performed empirically without any scientific approach or structured process and implies the inherent problem of ongoing conflicts of interest between the different people or groups. In economy, a comparable situation is found when a company is regarded in its relationships towards internal and environmental interactions with these groups, institutions or authorities, which are regarded as stakeholders of a company, Rosenstock, *et al*. (1998),

http://www.sapintegratedreport.com/2013/de/sap-im-kontext/dialog-mitstakeholdern.html, https://www.basf.com/en/company/sustainability/responsible-partnering/networks.html.

Stakeholders, that are - with regard to the provision of healthcare - defined as all persons, institutions and authorities that interact with a hospital represent a heterogenic entity with diverting interests that are expected to be fulfilled by the hospital. Even conflicts within a Stakeholder Relationship Management-concept need to be clarified. Although there are some selective approaches to identify stakeholders in the hospital setting, Lee, *et al.* (2012), Oinas-Kukkonen, *et al*. (2008), to date there are no detailed or structured concepts for a SRM in this context. There are particularly no approaches to stratify stakeholders according to their importance and attitude

towards the hospital which seems to be of high importance for a successful management. The focus on patients as the main group of stakeholders is self-evident, Moy, *et al*. (2014) but disregards the fact that all other groups of stakeholders may have an important impact as well. Competitive advantages may be achieved by accessing these stakeholders in a systematic approach that requires, however, a structured recognition and evaluation of these stakeholders that should be continuously performed and re-evaluated for a sustaining management of their interests.

The present study is conducted from a hospital's point of view. This implies that the validation of the stakeholders is focused from this point of view and may differ from the point of view the stakeholders themselves have implying that they consider their impact and importance differently. The evaluation and prioritization of stakeholders from a hospital's point of view is an institution-specific process. Although several stakeholders or groups can be regarded as generally important, e.g. patients, the validation of all stakeholders must be performed by each hospital individually. Therefore, the present study can only serve as an example that offers a model for this process. As hospitals of different structures (e.g. academic vs. non-academic institutions) and different levels of care have to fulfill different expectations, the absolute number of stakeholders and the importance of defined comparable stakeholders may vary considerably between the hospitals, Millar, *et al*. (2015), Pandi-Perumal, *et al*. (2015). The stakeholder group of employees may serve as an example in this context. In an academic hospital, there are more different employee groups than in hospitals without this background, as, amongst others, scientific researchers and students have to be subsumed in this group, Parker, *et al*. (2012), Laker, *et al*. (2012), Bhaumik, *et al*. (2015). Their interests towards the hospital management may vary considerably from the interests of other typical employee groups, such as nurses or non-medical employees that are present in every type of hospital and can – more or less – be regarded as groups with comparable interests in all institutions, Lambooij, *et al*. (2013). Therefore, the hospital-specific structures have to be respected in the supposed model during the first step of stakeholder identification and may become more complex including the definition of subgroups, depending on the type of each hospital. Hence, SRM should become an essential part of strategic hospital management and empathy with respect to the importance of SRM needs to be developed.

The second step of evaluating the defined stakeholders is based on a subjective assessment of the individual of the stakeholder groups. An objective quantification of the parameters strength of influence and attitude is difficult to perform. The applied semi-quantitative approach may help to facilitate this step and make it reproducible when a re-evaluation is performed during SRM. An evaluation of economic stakeholders, such as suppliers of medical or non-medical products, can be done more objectively using data of the purchasing department that easily show the relevance of single providers. In contrast, many items in the evaluation of primarily non-economic stakeholders, e.g. attitude of patients, are merely subjective and can hardly be transformed into calculable numbers. Therefore, the evaluation of impact and attitude in the second step of the presented model combines objective and subjective estimations based upon a continuous evaluation and analysis of SRM-related results. This underlines that the panel of people who perform this evaluation must consist of a sufficient number of persons with different professional background to avoid a relevant bias during the process, Millar, *et al.* (2015), Pandi-Perumal,(*et al*. (2015), Lambooij, *et al*. (2013). In the present study, eight persons represented the most relevant professions generally involved in management decisions in hospital. When key stakeholders are defined, the individual experience of the different experts is important. Regarding patients and patient-related people (including relatives and patient organizations) as one of the key stakeholder groups, this group is characterized by a growing maturity based on the broad availability of medical knowledge and transparency regarding

quality reports and treatment results that are published by many hospitals as well as commonly used decision aids, Stacey, *et al*. (2008), Knops, *et al*. (2013). These aspects that may influence the attitude of this group are probably mostly realized by physicians and patient managers who are dealing with this group of stakeholders directly during their every-day work. Consequently, changes in these aspects are most likely and sensitively realized by physicians, whereas changes in the relationships to economic partners are much better realized by economists or logistic managers. This underlines the importance of a balanced composition of the evaluation panel in the presented model. Hence, the management of a hospital is in charge of considering the necessity of a balanced approach.

The third step of the supposed model is designed to visualize movements of stakeholders in the two major dimensions impact and attitude which is useful for creating hypothetic sceneries for the future as well as the documentation of stakeholder developments in a follow-up setting when SRM is performed continuously. The bi-dimensional four-field graphic display which can be used in this step is a very helpful and easy applicable tool for this purpose, Keele, *et al*. (1987). The movements of stakeholders within the graphical tool can be categorized in terms of "upwards" or "downwards" and "left" or "right" which enables an evaluation of these movements into the categories "desirable" or "critical". Consequently, the movements show, into which field of the matrix the stakeholders are shifting and underlines which stakeholders should be observed more intensively and which stakeholders should be cared for to achieve satisfactory relations with them. The estimation of these movements, either hypothetically assumed for a future scenario or during a follow-up evaluation, are certainly also based on a considerable proportion of subjective impressions and can hardly be quantified in an objective manner. However, this limitation with regard to scientific reproducibility is inherent in the entire process of SRM. As mentioned before, valid evaluations and estimations can only be achieved when a balanced impact of all professional groups involved in hospital management decisions is guaranteed. Furthermore, a corresponding software landscape needs to be developed in order to support SRM analysis and reporting.

In conclusion, SRM seems to be of growing importance in successful hospital management to achieve competitive advantages in the healthcare market. As there is only rudimentary experience for this process to date, the present study offers a feasible model for its performance based on an interdisciplinary evaluation, structuring and weighting. The suggested three-staged model is practicable in most institutions with a limited use of human and financial resources. Although it contains a number of subjective and semi-quantitative assessments, it can serve as a promising approach to further systematically perform SRM and develop more scientific evidence in the future in this important field of hospital management.

References

[1] Keele R.L., Buckner K., Bushnell S. (1987). "Identifying health care stakeholders: a key to strategic implementation". *Health Care Strateg Manage.*, 5(9): 4-10.

[2] Rosenstock L., Olenec C., Wagner G.R. (1998). "The National Occupational Research Agenda: a model of broad stakeholder input into priority setting". *Am J Public Health*, 88(3): 353-356.

[3] http://www.sapintegratedreport.com/2013/de/sap-im-kontext/dialog-mitstakeholdern.html

[4] https://www.basf.com/en/company/sustainability/responsible-partnering/networks.html

[5] http://www.dcgk.de/de/

[6] Savage G.T., Nix T.W., Whitehead C.J., Blair J.D. (1991). "Strategies for assessing and managing organizational stakeholders". *Academy of Management Executive*, 5(2): 61-75.

[7] Mitchell R.K., Agle B.R., Wood D.J. (1997). "Toward a Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What really Counts". *Academy of Management Review*, 22 (4): 853 - 886.

[8] Cavazza M., Jommi C. (2012). "Stakeholders involvement by HTA Organizations: why is so different?". *Health Policy*, 105(2-3): 236-245.

[9] Lawrence D. (2009). "Patients, not purchases: Customer relationship management is slowly, and carefully, finding its way into healthcare". *Healthcare Informatics*, 26 (8): 17-18, 20.

[10] Lee E.W. (2012). "Data mining application in customer relationship management for hospital inpatients". *Healthcare Inform Res.*, 18(3):178-185.

[11] Oinas-Kukkonen H., Räsänen T., Hummastenniemi N. (2008). "Patient relationship management: an overview and study of a follow-up system". *J. Healthcare Inf. Manag.*, 22(3): 24-29.

[12] Moy N.Y., Lee S.J., Chan T., Grovey B., Boscardin W.J., Gonzales R., Pierluissi E. (2014). "Development and sustainability of an inpatient-to-outpatient discharge handoff tool: a quality improvement project". *Joint Commission Journal on Quality and Patient Safety*, 40(5): 219-227.

[13] Millar R., Freeman T., Mannion R. (2015). "Hospital board oversight of quality and safety: a stakeholder analysis exploring the role of trust and intelligence". *BMC Health Serv Res*., 2015 June 16;15(1):196.

[14] Pandi-Perumal S.R., Akhter S., Zizi F., Jean-Louis G., Ramasubramanian C., Edward Freeman R., Narasimhan M. (2015). "Project Stakeholder Management in the Clinical Research Environment: How to Do it Right". *Front Psychiatry*, 2015 May 18; 6(1): 71.

[15] Parker R.M., Desborough J.L., Forrest L.E. (2012). "Stakeholder perceptions of a nurse led walk-in centre". *BMC Health Serv Res*. 2012 Nov 5; 12(1): 382.

[16] Laker C., Rose D., Flach C., Csipke E., McCrone P., Craig T., Kelland H., Wykes T. (2012). "Views of the Therapeutic Environment (VOTE): stakeholder involvement in measuring staff perceptions of acute in-patient care", *Int J Nurs Stud.*, 49(11):1403-1410.

[17] Bhaumik S., Rana S., Karimkhani C., Welch V., Armstrong R., Pottie K., Dellavalle R., Dhakal P., Oliver S., Francis D.K., Nasser M., Crowe S., Aksut B., Amico R.D. (2015). "Ethics and equity in research priority-setting: stakeholder engagement and the needs of disadvantaged groups". *Indian J Med Ethics*, 12(2):110-113.

[18] Lambooij M.S., Hummel M.J. (2013). "Differentiating innovation priorities among stakeholder in hospital care". *BMC Med Inform Decis Mak*, 2013 Aug 16;13(1) :91.

[19] Stacey D., Samant R., Bennett C. (2008). "Decision making in oncology: a review of patient decision aids to support patient participation". *CA Cancer J Clin.*, 58(5):293-304.

[20] Knops A.M., Legemate D.A., Goossens A., Bossuyt P.M., Ubbink D.T. (2013). "Decision aids for patients facing a surgical treatment decision: a systematic review and meta-analysis". *Ann Surg*., 257(5):860-866.