

“Impact of Informational and Social Support Services on Patient’s *Perceived Satisfaction* from Virtual Pathology Communities”

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Abstract:

In the last few years usage of online health communities is increasing with rapid rate. Hospitals or individual physicians are using it for marketing and patient engagement efforts. People gain satisfaction by interacting online with experts who know about the disease. In online health community, both informational support and social support play significant role in generation of satisfaction. Despite of significant role of informational support and social support in generation of satisfaction there has been limited effort to conceptualize and measure patient’s satisfaction towards Virtual Pathology Communities. The present study aims to identify the impact of online informational support & social support services on the patient’s *perceived satisfaction* from Virtual Pathology Communities.

Keywords: Health Communities, Virtual Pathology Communities, Informational support, Social support.

Introduction:

The use of internet enables millions of people worldwide to exchange information and solve problems. Digital Strategy Consulting & Partners (2009) reported about consumer internet behavior in India [1] ; Internet has become a major part of one’s daily or weekly schedule. The internet is a gateway to world knowledge as well as a massive platform for national media and documentation. In India over two thirds of people use it several times a week or more. As reported by Financial Times [2], online communities like Facebook gets more hits per week than the popular search engine Google. Online communities are also referred as Virtual Communities (VC), and can be categorized in social networking communities like facebook and professional communities like LinkedIn.

Many people gain relief by speaking to individuals and professionals who are knowledgeable about the problem

they are experiencing. In online health community, both informational support and social support play significant role in generation of satisfaction.

The present study was planned to test the impact of online informational support services on patient’s perceived satisfaction from virtual pathology communities & to test the impact of online social support services on patient’s perceived satisfaction from virtual pathology communities.

Research Methodology:

The Online pathology communities generally provide online informational support and social support. The present study tries to identify that whether there is an impact of informational support services and social support services on patient’s satisfaction from virtual pathology communities or not. Satisfaction is an evaluative judgment that has been modeled cognitively by researchers [3]. Satisfaction originates

in comparison of the level of service performance, quality, or other outcomes perceived by the patient with an evaluative standard.

Information support service :

Increasing number of individuals are using the internet to meet their health information needs. Informational support or seeking health information from online health communities has been found to affect patient's decision making [4]. Computer-based patient support systems benefit patients by providing informational support that increases their participation in health care [5].

Social Support service :

Social support has been associated with many health benefits e.g. stress buffering, lowering the depression, and strengthening of the immune system [6]. In many cases, patient's have reported that they receive much more understanding from the people in these communities than from their offline social network such as family members, friends, and coworkers [7].

Perceived Satisfaction :

Perceived satisfaction is a dependent variable which depends on Informational support service and social support service. Information support and social support services are independent variables which may or may not affect perceived satisfaction.

Samples and Design :

A survey was done to collect the data from walk-in patients from pathology laboratories of Indore and who were members of the online health communities. Observations from 103 patients were collected. A regression technique was used to analyze the data and to test the hypotheses. We used SPSS 17 for Regression analysis.

Information support service: A scale adapted from Nambisian et al [8] having following five items that

reflect the effectiveness of the information that customers obtain from the online community was administrated using a 7-point Likert-type scale :

I obtain information that is readily usable

I obtain information that is credible

I obtain information that is relevant

I obtain information that is reliable

I obtain information in a timely manner

Social Support service: This scale was adapted from Zimet et al [9], a multidimensional scale, developed specifically for measuring perceived social support. The scale had five items presented using a 7-point Likert-type scale :

I could count on my friends in the discussion board when things went wrong

I had friends in the discussion board with whom I could share my joys and sorrows

I got the emotional help and support I needed from the discussion board

I could talk about my problems with the members in the discussion board

I knew someone in the discussion board who was a real source of comfort to me

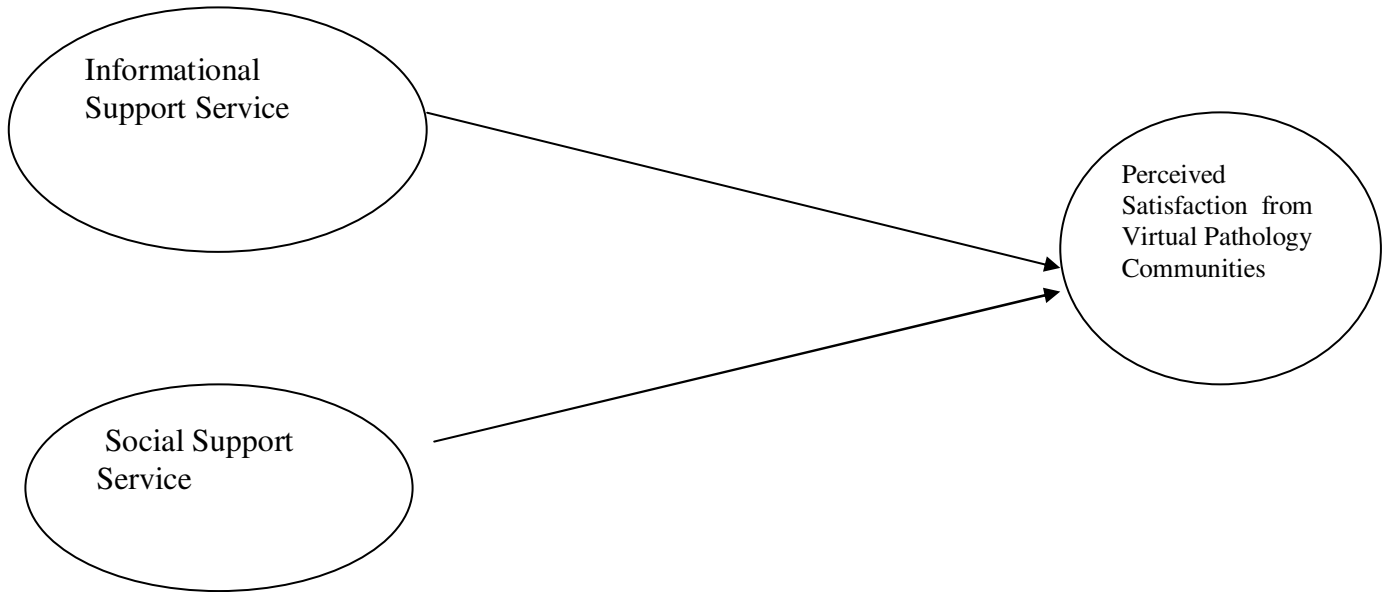
Satisfaction derived from online pathology community – This was self developed questionnaire with a 7-point Likert-type scale :

I am satisfied with my decision to select the particular online pathology community.

My choice to select the online pathology community was a wise one.

I feel good about my decision concerning my online pathology community.

Figure 1



Observations

Out of 103 respondents, 67 (65%) were Male and 36 (35%) were female. 27% respondents were under 25 yrs, 33% were between 26-30 yrs, 20% were between 31-35 yrs, 16% were between 36-40 yrs and 3% were above 41 yrs. With regards to education background, 31% had completed high school education, 22% were under graduate and 37% respondents had master degree. The majority of the respondents were members of 2 or more online communities pertaining to pathology. Regression analysis was conducted to test the hypotheses.

Results

The results of the simple regression can be found from table 1 and 2. As predicted hypothesis, H1 was not supported—information seeking effectiveness had a significant positive impact on satisfaction from Virtual pathology communities ($\beta=0.000$, $p<0.05$). However, H2 was supported—*social support* did not have any impact on perceived *satisfaction* ($\beta=0.111$, $p>0.05$) from *Virtual pathology communities*.

Discussion

The findings of the present study indicate there is an impact of informational support service on the patient's satisfaction towards online pathology community. This suggests that current online pathology communities should focus on the information sharing and exchanging component of their virtual communities. Our results are in concordance with the study of Nambisan [8] that Information seeking play an important role in online communities. Though their study evaluates the impact on perceived empathy, this study evaluated patient's perceived satisfaction. The health information seeking is associated with a wide variety of factors and 'search behavior'. It varies on the type of information sought, reasons for searching and experience levels[10]. Satisfaction plays an important role in health industry. According to Zeithaml [9], the perceived value of satisfaction differs from consumer to consumer because it is connected with the unique needs of each customer that the product/service fulfils. In addition, the degree to which these needs satisfy them also varies. Depending upon the

Table 1 Information Support---→ Satisfaction

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|-------|-----------------------|-----------------------------|------------|---------------------------|-------------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | .050 | .000 | | 4267051.561 | .000 |
| | INFORMATIONAL SUPPORT | 1.000 | .000 | 1.000 | 4.745E8 | .000 |

a. Dependent Variable: SATISFACTION.

Table 2 Social support---→ Satisfaction

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|----------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 5.273 | .296 | | 17.816 | .000 |
| | SOCIAL SUPPORT | .062 | .055 | .111 | 1.116 | .267 |

a. Dependent Variable: SATISFACTION.

level of satisfaction brand equity may increase if the perceived quality is high or may decrease if the perceived quality is low [9].

Information support service can be made more effective by putting sections for Question and Answer, FAQ(Frequently asked questions), Archives, Library repository (articles drawn from the scientific and popular press), Consumer Guide (descriptions of health services, identifying good providers and being an effective consumer, health tips, new package information) and Referral Directory. Existing medical websites, such as WebMD, have recognized that they will have more visitors if they offer interactive community features such

discussion or Internet forums. Thus VC can become value creation agent. Misra et al (2008) discussed that healthcare virtual communities have the potential to become serious value-creation agents by combining content and communication [11].

Social support did not prove to have direct impact on patient’s perceived satisfaction in our study. But this finding does not mean that online pathology communities should lose their focus on enhancing social support. According to Gustafson et al [5]

social support play an important role in cancer diagnosis & treatment. The online community 'CHESS' provide benefits to patients by providing social support [5]. Support Services Forum can become more effective and develop satisfaction through Discussion Forum (facilitated bulletin boards for sharing information and support), Ask an Expert (patients receive a confidential response from experts) and Personal Stories & History. Visiting online pathology communities cannot replace physicians or pathologists. It should not be a substitute for visiting a physician and/or pathologist. Thus hospitals, medical professionals, and care-givers remain

the important source of information [12,13,14].

Limitations

The study was confined to a few diagnostic centers of Indore region only. The Sample size was small. Anxiety, lack of interest and lack of time at diagnostic centers were factors resisting participants to fill the questionnaire. In addition, in this study, participation was voluntary and there were no incentives for completing the survey.

References

- [1] Digital Strategy Consulting & Partners (2009). "Digital Market overview India Understanding the scale of change of online audiences and digital media in India" http://www.digitalstrategyconsulting.com/documents/DSC-Research-Market_Overview-India_with_intro.pdf
- [2] Financial Times (2010). *Facebook becomes bigger hit than Google*. <http://www.ft.com/intl/cms/s/2/67e89ae8-30f7-11df-b057-00144feabdc0.html#axzz23C8o1cjM>
- [3] Oliver, Richard L. *Satisfaction : A Behavioral Perspective on the consumer*. New York : The MacGraw-Hill companies, Inc. 1997.
- [4] Gustafson DH, McTavish F, Hawkins R. Computer-based support systems for women with breast cancer. *J Am Med Assoc*. 1999;281:1268-9.
- [5] Gustafson David H, Hawkins Robert, Pingree Suzanne, McTavish Fiona , Arora Neeraj K , Mendenhall John et al. Effect of Computer Support on Younger Women with Breast Cancer. *J Gen Intern Med*. 2001 July; 16(7): 435-445.
- [6] Dean A, Lin N. The stress buffering role of social support: Problems and prospects for systemic investigation. *J Health Soc Behav*. 1977;32:321-41.
- [7] Rheingold H. *The Virtual Community: Homesteading on the Electronic Frontier*. Reading, Massachusetts: Addison-Wesley Publishing Company, 1993.
- [8] Nambisan Priya. Information seeking and social support in online health communities: impact on patient's *perceived empathy*. *J Am Med Inform Assoc*. 2011 May; 18(3): 298-304.
- [9] Zeithaml V. Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence. *Journal of Marketing*. 1988;52 (3):2-22.
- [10] Lorence DP, Park H, Fox S. Assessing health consumerism on the web: A demographic profile of information seeking behaviours. *Journal of Medical Systems*. 2006;30(4):251-258.

[11] Misra R, Mukherjee A, Peterson R. Value creation in virtual communities: The case of a healthcare web site. *International Journal of Pharmaceutical and Healthcare Marketing*. 2008; 2(4):321-337.

[12] Jenkins V, Fallowfield L, Saul L. Information needs of patients with cancer: Results from a large study in U.K. centers. *British Journal of Cancer*. 2001; 84(1):48-51.

[13]. Kaminski E, Thomas R.J, Chamley S, Mackay J. Measuring patient's response to received information. *European Journal of Cancer*. 2001;37(6): 387.

[14] Mills M.E., Sullivan K. The importance of information giving for patients newly diagnosed with cancer: A review of the literature. *Journal of Clinical Nursing*. 1999; 8(6): 631-642.

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