

Original Research Article

Patient Satisfaction and Perception of Quality of Care in Outpatient Clinic in an Eye Specialist Hospital in Saudi Arabia

ABSTRACT

Aims: This study tries to evaluate patients' satisfaction with a particular view of the specific perceptions of the quality of care in an outpatients department of tertiary care hospital provided by the doctors, nurses and receptionists, considering the waiting time as a separate factor of influence.

Study Design: This study was based on a questionnaire survey.

Methodology: This is a cross sectional study, whereby responses were collected from 300 patients who received treatment in the Eye Specialist Hospital in Saudi Arabia. Systematic sampling of patients was employed for selecting the samples. The data was collected by meeting the customers face to face. Every question was explained to respondents so that patient can understand the requirement of each factor considered. The data collected was analyzed using IBM SPSS Statistics 21.

Results: The overall satisfaction level and the perception levels based on services provided by doctors, nurses and receptionists were observed to be significantly higher than the neutral perception level, at 1% level of significance. However, the perceptions of the patients regarding the waiting time for service was significantly lower than the neutral perception level, at 1% level of significance. The waiting time for consulting with the doctor was more than 30 minutes in about 70% of the cases. The study also reveals that the male patients and those having long standing health conditions perceive better satisfaction levels than others. However, other demographic factors such as age, education level, income and ethnic group are not significantly related to the overall satisfaction levels.

Keywords: Patient satisfaction, Out-patient, Eye specialist hospital, Saudi Arabia.

1. INTRODUCTION

Patient satisfaction is a key basis by which the quality of health care services is assessed. It can be characterized as a subjective assessment of the service received, measured against the individual's desires. Patients' judgment of the quality of clinic services and their feedback are vitally important when considering quality monitoring and change within a service. Patient satisfaction data are routinely gathered and utilized for persistent quality assessment by human services organizations along with doctor's own facilities across developing nations [8].

There are three reasons other than external governmental pressures, professional bodies and health authorities as to why health experts ought to consider patient satisfaction as important information to be obtained [15]. Firstly, research has demonstrated that satisfaction is an essential result of measure. Patient satisfaction may be an indicator of whether patients complete their prescribed treatments, the extent with which patients return for further treatment and the probability of patients changing their

41 health care provider. Emerging research on patient satisfaction has illustrated improvement in health
 42 status of patients who report high rates of satisfaction with their health care providers. Secondly,
 43 patient satisfaction is an inexorably valuable measure in surveying consultations and examples of
 44 correspondence within the health care sector. Thirdly, patient feedback can be utilized efficiently in
 45 order to choose between techniques of organization and provision of human services [6].

46 Contemporary organizations perceive patient/customer satisfaction studies as having various
 47 advantages. However, understanding the client group and customer satisfaction surveys are not solely
 48 useful as a means of enabling patients to express their supposition; they are, additionally, a way in
 49 which patients can be educated about new data obtained about organizations or social insurance
 50 associations, for example, developments or changes and vehicles of securing clients' perspectives.
 51 Patient satisfaction has also found to be correlated with the degree to which general medical service
 52 needs are met [7]. Assessing to what degree patients are fulfilled by health services is clinically
 53 important, as satisfied patients are more inclined to agree to treatment, take a dynamic part in their own
 54 consideration, keep utilizing medical care services, remain with the same health care providers and
 55 maintain a particular treatment protocol.

56 A source of dissatisfaction with healthcare, frequently noted by patients, is waiting time; studies have
 57 illustrated the relationship between waiting time and general patient satisfaction, with longer waiting
 58 times being correlated with diminished patient satisfaction [2]. A relationship between waiting time
 59 and patient satisfaction has been particularly demonstrable in the emergency health care sector, where
 60 waiting time may be significant and the level of patient distress may be high. Results here may not
 61 impact upon conventional primary and specialty care settings, since subjective contrasts between
 62 situational emergency care and outpatient settings are generous. In light of this, the study will use a
 63 cross-sectional survey to assess the influence of services provided by doctors, nurses and receptionists,
 64 considering the waiting time as a separate factor of influence on patient satisfaction of primary care in
 65 an outpatients department of tertiary care hospital.

66 2. LITERATURE REVIEW

67 Discussions about how the quality of health care ought to be measured progressively incorporate
 68 patient satisfaction as one of the vital measurements. However, a solitary clarification of why studies
 69 of patients' views have become such an integral part of the NHS would likely not refer to the effect of
 70 scientific arguments regarding the assessment of health services, rather, the powerhouse of NHS
 71 Management Inquiry. The inquiry crisply and earnestly censured the failure of the NHS to utilize well
 72 established techniques of statistical surveying to evoke the perspectives and encounters of its clients
 73 [6].

74 The patient satisfaction survey can be an extremely helpful device for a medical practice if utilized
 75 suitably. Conducting a survey requires a large amount of staff time; hence, it is useful to determine
 76 what you are attempting to measure before embarking on conducting a survey. Potential issues which
 77 may arise are not self-evident, yet taking the time to discuss them with the staff in their entirety will
 78 help to focus the surveying efforts so they can best utilize staff time efficiently [10].

79 Healthcare industries have recently seen developments being made towards consistent quality change,
 80 increasing the momentum since 1990. As per Donabedian's [5] model that provides a framework for
 81 examining health services and evaluating quality of health care, information about quality of care can
 82 be drawn from three categories: "structure," "process," and "outcomes." Structure describes the
 83 context in which care is delivered, including hospital buildings, staff, financing, and equipment.
 84 Process denotes the transactions between patients and providers throughout the delivery of healthcare.

85 Finally, outcomes refer to the effects of healthcare on the health status of patients and populations.
 86 Medical services managers subsequently focused upon patient focused care as a significant factor in
 87 their health awareness mission. Healthcare managers attempting to accomplish excellence, consider
 88 patient recognition of services when outlining their methods for quality change in this sector. As of
 89 late, the medical service controllers have moved towards a business sector-driven methodology of
 90 transforming patient fulfillment overviews, into a quality change device for general authoritative
 91 execution [1].

92 One of the assumptions underlying England's National Health Service (NHS) approach is that, giving
 93 input about patients' experiences to medical services organizations will drive betterment. In particular,
 94 in 2000, the NHS Plan stated that a patient study would "secure year-on-year upgrades in patient
 95 fulfillment". Since 2002, the Inpatient Survey for Acute NHS Trusts has been directed towards all
 96 major NHS doctor's facilities in England, recruiting roughly 135,000 adult patients annually. The polls,
 97 sent by post, record waiting times, specialists' and attendants' patient rapport, staff responsiveness,
 98 health facility food and cleanliness, tolerance data and a co-appointment of consideration and patients'
 99 respect [11].

100 It is important to emphasize that there is no "gold standard" measure of patient satisfaction. It is
 101 conceivably less demanding to ask questions on patients' privacy, respect and emotions than to ask
 102 questions regarding correspondence of data or inclusion in healthcare. Overreliance on negative
 103 articulations to excite data regarding clients' recognitions and perspectives may result in a deceptive
 104 picture and henceforth, provide a poor foundation for illuminating strategy aimed at enhancing the
 105 quality of care [4].

106 It is generally perceived that there is a requirement for thorough systems, other than clinical
 107 discussions, to evoke patients' perspectives on such matters as treatment choices and the quality of care
 108 received. Much effort has, in this way, been dedicated to creating and assessing survey measures that
 109 inspire reports about particular care experiences, reflecting the nature of care, not amenities. Such
 110 questions are: less subjective; less impacted upon by patient attributes; more interpretable and,
 111 accordingly, may be followed up on for quality change purposes [3].

112 It is a moral and lawful tenet that patients are informed and included in their health care, to at least
 113 minimal standards, initial data demonstrates that a high proportion of patients wish to be involved in
 114 the choice processes. When the primary aim is to incorporate patients in the decision making process,
 115 it is the methodology of association, instead of its result, that is vital. The criteria of adequacy are
 116 consequently characterized by the moral standards and patients' inclinations. For example, imparted
 117 choice making can be assessed regarding data conveyed on treatment choices, checking of
 118 comprehension and inclinations, and settling on an imparted choice [14]. Patient inclusion can likewise
 119 bring about better methods and health outcomes. It could, for example, enable clinicians to be more
 120 receptive to patients' desires, adding to better usage of clinical rules, enhancing safety by including
 121 patients in updating procedures and resulting in increased satisfaction with care. When included in this
 122 manner, patients can be seen as co-makers of health care, in light of the fact that their choices and
 123 conduct impact healthcare provision and its results. Result measures should mirror the consequences of
 124 the processes or results of care that is expected.

125 In the event that patient satisfaction is to take its place aside morbidity, mortality, and practical status,
 126 a few basic estimation issues must be addressed. To start with, scale developers and end-users need to
 127 be transparent regarding what they are measuring. 'Patient satisfaction' is not a unitary idea, rather, a
 128 refining of observations, patients' convictions about events and qualities. These observations reflect
 129 actual events, whereas qualities are the merits which patients apply to those events. These mirror the

130 extent to which patients consider particular events to be alluring, expected or essential [9]. Most
 131 contemporary measures of patient satisfaction utilize hybrid questions that evaluate recognition and
 132 values simultaneously. In answering a question, patients should first gauge wait time prior to
 133 consulting with a doctor, contrast it and determine an inner standard, prior to delivering a general
 134 judgment. Such hybrid questions hold the ideals of semantic economy, yet make it hard to distinguish
 135 observations from qualities. Given these semantic ideas, a patient who receives poor care, yet has low
 136 inner standards, may report the same level of satisfaction as a patient who receives exemplary care,
 137 whose benchmarks are exceptionally high.

138 2.1 Objectives of the study

139 The aim of this paper is to present an original patient satisfaction survey conducted in the outpatient
 140 clinic of an Eye Specialist Hospital in Saudi Arabia. The objectives of the customer satisfaction survey
 141 are focused on the assessment of the critical satisfaction dimensions based on services provided by
 142 doctors, nurses, receptionists and waiting time and the relationship of the demographic factors with the
 143 overall satisfaction levels of the patients. Based on the findings of the exploratory investigations the
 144 following hypotheses were established for the quantitative study:

145
 146 H₁: The overall satisfaction level and the perception levels based on services provided by doctors,
 147 nurses, receptionists and waiting time are significantly positive.

148 H₂: The demographic factors such as gender, age, education level, income, health history and ethnic
 149 group are not significantly related to the overall satisfaction levels.

150

151 3. METHODOLOGY

152

153 This paper adopts both the descriptive and explanatory survey design. Consequently, while the paper
 154 seeks to describe the characteristics of patients' behavior in terms of their overall satisfaction as well
 155 as the services provided by doctors, nurses, receptionists and waiting time. The population of this
 156 paper comprise of all the outpatients who attended the outpatient clinic.

157

158 3.1 Exploratory survey / Questionnaire

159

160 Initial discussions were held with patients visiting the outpatient clinic of the eye specialist hospital to
 161 describe the characteristics contributing to their satisfaction. This was undertaken to identify the most
 162 relevant factors affecting the patients during their visits to the clinic. The inputs from the focused
 163 group discussions were used to establish the customer satisfaction model and to frame the
 164 questionnaire. The model consisting of four factors was sub defined as per the perception of the
 165 patients. All these four factors created clear sense of awareness in patients mind regarding satisfaction.
 166 The research included all four factors to promote distinct validation and any further evaluation, if
 167 required. The factors and the number of questions (indicated in the brackets) within the factors that
 168 were perceived by the patients to have some influence on the patient satisfaction are: Services provided
 169 by Doctors (11 questions), Services provided by Nurses (8 questions), Services provided by
 170 Receptionists (3 questions) and Waiting time for the service (4 questions). The structured
 171 questionnaire consisting of closed ended multiple choice questions were employed for the survey.
 172 Given that most of the items in the questionnaire were targeted to measuring the respondents'
 173 perceptions and attitudes, a five-point Likert-type scale is considered where the responses were coded
 174 1 to 5 corresponding to very good, good, satisfactory, poor, very poor respectively. A Cronbach
 175 coefficient alpha test was found to be 0.893. The purpose is to determine internal consistency of the

scale used. According to Sekaran [12] Cronbach alpha is a reliability coefficient that indicates how well the items are positively correlated to one another. The closer the Cronbach alpha is to 1, the higher the internal consistency. Based on the guidelines by Sekaran [12], a scale of 0.6 is considered to be poor, 0.7 ranges are acceptable and those over 0.8 are good.

The combination of both descriptive and inferential statistics was used as methods of data analysis.

181

182 3.2 Data collection

183

184 The inputs received from the focused group discussions were used to frame the questionnaire, both in
185 English and Arabic, which incorporated the factors and the questions that were perceived by the
186 patients to have influence on the patient satisfaction. The questionnaire was distributed to 300 patients
187 who received treatment in the Eye Specialist Hospital. Systematic sampling of patients (time interval
188 of 15 minutes) was employed for selecting the samples. The data was collected by meeting the
189 customers face to face. To make sure the questionnaire were fully understood, every question was
190 explained one by one to respondents so that patient can easily understand the requirement of each
191 factor considered.

192 Since the analysis is based on one-sample t-tests, the effective power of the test will be almost 1.00, as
193 shown in the Figure 1 and analysis below, using GPower software.

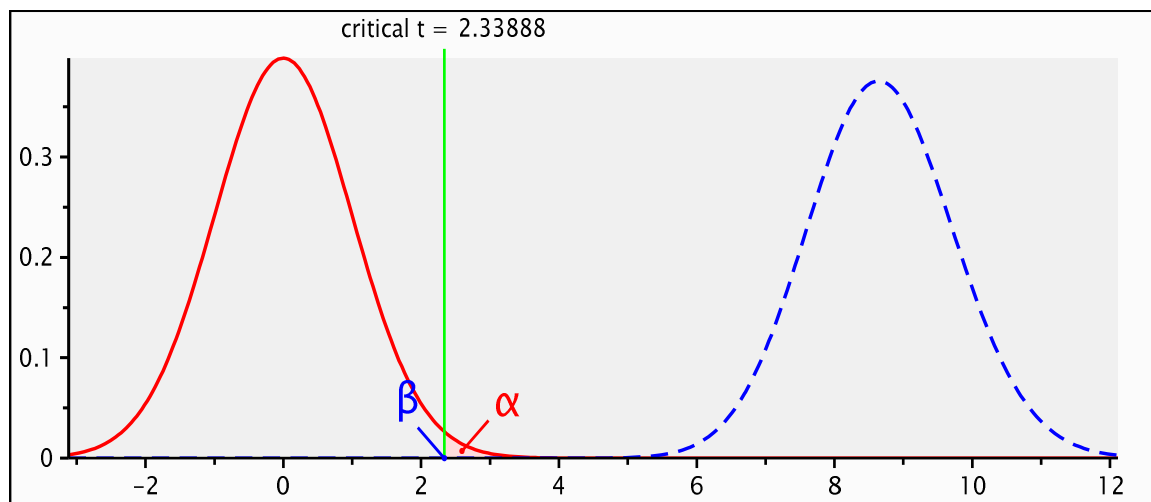
t tests - Means: Difference from constant (one sample case)

Analysis: Post hoc: Compute achieved power

Input:	Tail(s)	=	One
	Effect size d	=	0.5
	α err prob	=	0.01
	Total sample size	=	300
Output:	Critical t	=	2.338884
	Df	=	299
	Power (1- β err prob)	=	1.000000

194

195



196

197

198 Fig.1. The Power of the t tests.

4. DATA ANALYSIS AND FINDINGS OF THE STUDY

The data collected were analyzed using IBM SPSS Statistics 21.

4.1 Respondents' Profile

The questionnaire includes a section on socio-demographic characteristics. The study of demographics of the respondents provided the guidance to analyze the individual perception towards patient satisfaction. Demographic factors included gender, nationality, age-group, education level, income and occupation. Further the data regarding health history of the patient for presence of long standing health problems. It is observed that 85% of the respondents were male Saudi nationals, about 94% are below 45 years of age and almost the entire group of patients was employed. It is observed that about 72% of them had long standing health problem.

4.2 Significance of patient satisfaction factors

One Sample t-test is applied on patient satisfaction data. The descriptive statistics of Table 1 displays the 300 respondents' mean, standard deviation and standard error against each satisfaction factor.

Table 1. Descriptive Statistics

Satisfaction Factor	N	Mean	Std. Deviation	Std. Error Mean
Overall	300	2.4167	1.12574	.06499
Doctor	300	2.1733	.60968	.03520
Receptionist	300	2.5208	.11649	.00673
Waiting Time	300	3.7967	.40315	.02328
Nurses	300	2.6521	.52103	.03008

Satisfaction factors can be categorized as per their mean disperse. As per data analysis that has ranked the satisfaction factor's mean as to which factor is giving highest level of customer satisfaction, the services rendered by doctors has the highest level of patient satisfaction.

Table 2 shows the results of the one-sample "t-test" applied on patient satisfaction data. It can be observed that the overall satisfaction level and the perception levels based on services provided by doctors, nurses and receptionists were observed to be significantly higher than the neutral perception level of 3 (on a five point scale), at 1% level of significance. However, the perceptions of the patients regarding the waiting time for service was significantly lower than the neutral perception level, at 1% level.

Table 2. One-sample t-test results

Satisfaction Factor	Test Value = 3				
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference

					Lower	Upper
Overall	-8.975	299	.000	-.58333	-.7112	-.4554
Doctor	-23.485	299	.000	-.82667	-.8959	-.7574
Receptionist	-71.247	299	.000	-.47917	-.4924	-.4659
Waiting Time	34.227	299	.000	.79667	.7509	.8425
Nurses	-11.566	299	.000	-.34792	-.4071	-.2887

Further, as shown in Figure 2, the waiting time for consulting with the doctor was more than 30 minutes in about 70% of the cases.

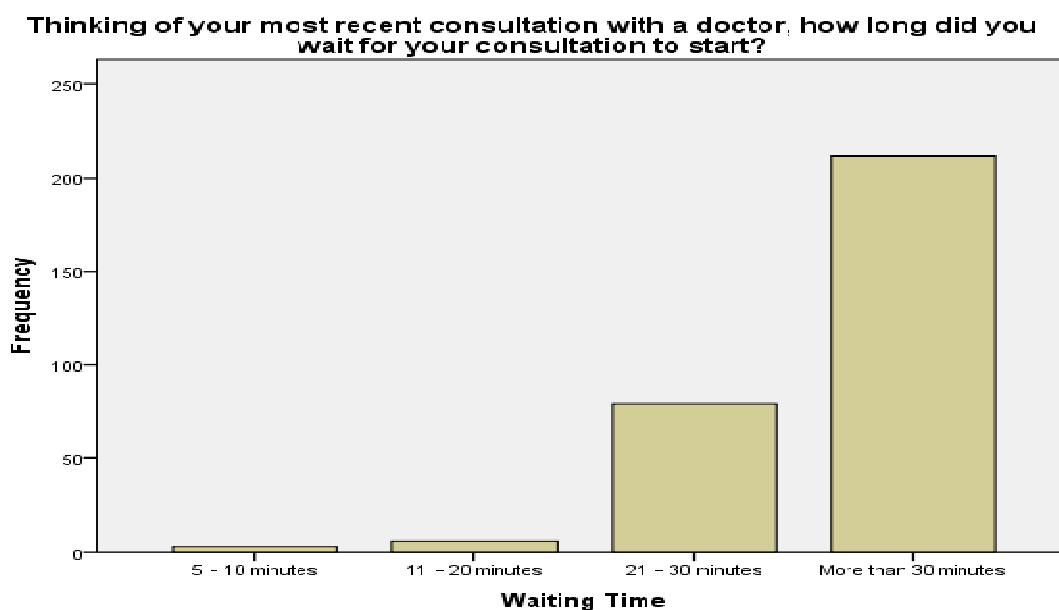


Fig. 2. Waiting time for consultation

4.3 Influence of demographic factors on patient satisfaction

Chi-Square tests were conducted to find whether the demographic factors have any influence on patient satisfaction. Table 3 provides the Chi-Square values and its two-tailed levels of significance for significant variables.

Table 3. Results of Chi-square tests for significant variables.

Variable	Pearson Chi-square	Significance (two-tailed)
Gender	16.112	0.013
Having long standing health problem	112.439	0.000

It is observed that the male patients and those having long standing health conditions perceive better satisfaction levels than others. However, other demographic factors such as age, education level, income and ethnic group are not significantly related to the overall satisfaction levels.

5. SUMMARY AND CONCLUSIONS

This paper presents an original patient satisfaction survey conducted with a particular view of the specific perceptions of the quality of care provided by the doctors, nurses, hospital staff and waiting time for consultation as an additional important factor as perceived by the patients of the outpatient clinic of the eye specialist hospital.

Results indicated that the patients' perception about the quality of the service they received, and their satisfaction level regarding physician's behavior are significantly high. Majority of patients were satisfied with the positive attitude of doctors in 'listening to patients' and the extent to which their doctor demonstrated high levels of capability and the time allocated for the patents consultation. Nurse's abilities to provide treatment or arrange for it to be provided were rated especially high, with all patients stating that this was very good.

The overall patient satisfaction level has been observed to be 2.41, on a five point scale (with reverse codification), which is significantly higher than the neutral perception level, at 1% level of significance. Further, the satisfaction perceptions of patients regarding the services rendered by doctors, nurses and receptionists were significantly higher than the neutral perception level, at 1% level of significance.

However, the study reveals that the perceptions based on waiting time was significantly lower than the neutral perception level, at 1% level of significance. The waiting times have impacted upon patient satisfaction and perceptions of quality of care. These findings are in line with the findings of the research by Camacho, et. al. [2]. It is observed that the waiting time for consulting doctors exceeded 30 minutes in about 70% of the cases.

The male patients and those having long standing health conditions perceive better satisfaction levels than others. However, other demographic factors such as age, education level, income and ethnic group are not significantly related to the overall satisfaction levels.

In response to these findings, the health care facility should aim to set targets for quality change in the current areas which are in need of improvements. The study provides the eye specialist hospital with insights into the kinds of service patients find most appropriate for their needs. However, the governmental expense of intercession mirrors the need for more general interventions.

It must be noted that this study includes only the investigation for the patients attending a particular eye specialist hospital in Saudi Arabia. Sample size limits the scope of large scale applicability of the results. Data gathered from a larger sample size may be useful to further validate the results. Further there is ample scope to test the results using data from other hospitals.

REFERENCES

1. Al-Abri, R., & Al-Balushi, A. Patient Satisfaction Survey as a Tool Towards Quality Improvement. Oman Med J. 2014 Jan; 29(1): 3–7.

- 292 2. Camacho, F., Anderson, R., Safrit, A., Jones, A. S., Hoffmann, P. The Relationship
293 between Patient's Perceived Waiting Time and Office-Based Practice
294 Satisfaction.NC Med J November/ December 2006, Volume 67, Number 6.
- 295 3. Cleary, P. D. The increasing importance of patient surveys. Now that sound methods
296 exist, patient surveys can facilitate improvement. BMJ. 1999 Sep 18; 319(7212):
297 720–721. .
- 298 4. Cohen, G., Forbes, J., Garraway, M. Can different patient satisfaction survey
299 methods yield consistent results? Comparison of three surveys.BMJ 1996;313:841.
- 300 5. Donabedian, A. The quality of care: How can it be assessed? JAMA, 1988; 121 (11):
301 1145–1150
- 302 6. Fitzpatrick, R. Surveys of patient satisfaction: I-Important general considerations,
303 BMJ 1991;302:887-9.
- 304 7. Ilioudi, S., Lazakidou, A., Tsironi, M. Importance of Patient Satisfaction Measurement
305 and Electronic Surveys: Methodology and Potential Benefits.International Journal of
306 Health Research and Innovation, 2013; 1(1): 67-87.
- 307 8. Juliet Nabbuye-Sekandi, F. E., Tugumisirize, J., Nshimye, E., Mbabali, S., Peters, D.
308 H. Patient satisfaction with services in outpatient clinics at Mulago hospital, Uganda,
309 DOI: <http://dx.doi.org/10.1093/intqhc/mzr040> 516-523 First published online: 20 July
310 2011 .
- 311 9. Kravitz, R. (1998). Patient Satisfaction with Health Care, Critical Outcome or Trivial
312 Pursuit? J Gen Intern Med. 1998 Apr; 13(4): 280–282.
- 313 10. Massachusetts Medical Society. Patient Satisfaction Surveys ,PHYSICIAN
314 PRACTICE RESOURCE CENTER. 2004. Retrieved April 6, 2015, from
315 [http://www.massmed.org/physicians/practice-management/patient-satisfaction-](http://www.massmed.org/physicians/practice-management/patient-satisfaction-surveys-%28pdf%29/)
316 [surveys-%28pdf%29/](http://www.massmed.org/physicians/practice-management/patient-satisfaction-surveys-%28pdf%29/).
- 317 11. Reeves, R., West, E., Barron, D. Facilitated patient experience feedback can improve
318 nursing care: a pilot study for a phase III cluster randomised controlled trial. BMC
319 Health Serv Res. 2013; 13: 259. .
- 320 12. Sekaran, U. Research Methods for Business: A Skill –Building approach. New York:
321 John Wiley & sons. Inc.2000;308-313
- 322 13. Wensing, M., Elwyn, G. Methods for incorporating patients' views in health care.
323 BMJ. 2003 Apr 19; 326(7394): 877–879.
- 324 14. White, B. Measuring patient satisfaction: how to do it and why to bother. Family
325 practice management.1999; 6: 40-44.
- 326