PERCEIVED MET & UNMET NEEDS OF PATIENTS UNDERWENT ARTHROSCOPIC ACL RECONSTRUCTION DONE BY ARTHROSCOPIST ON HIS AND ON BEHALF OF OTHER ORTHOPAEDIC SURGEON AS SHADOW SURGEON

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ABSTRACT: Undergoing surgery is a very stressful experience. Orthopaedic emergency surgeries are different from elective surgeries, patients have ample time to understand the surgical procedure and their expectations are high since most of the time patients are able to do their activities of daily living and routine lifestyle is not compromised. So, patients prefer hospital and surgeon of there choice. Not all orthopaedic surgeons perform arthroscopic surgeries because of learning curve and the instruments required to perform them. So, many a times arthroscopist has to go to the patient on demand of the referring general orthopaedic surgeon and perform surgery on their behalf. This study was conducted to assess the perceived met & unmet needs between two group of patients, those go directly or referred to arthroscopist and followed up by him (Group A) and whose surgery was performed by arthroscopist on behalf of orthopaedic surgeon without the knowledge of patient (Group B). A descriptive exploratory study was conducted using needs met inventory in which telephonic interviews of 90 patients operated for Arthroscopic ACL reconstruction (between Jan 2013 to Dec 2013) operated by same surgeon was done. Needs met inventory tool was designed over the experiences patients had during his/her arthroscopic surgery, from OPD consultation to post op rehabilitation. There were 48 patients in Group A and 42 patients in Group B. It was found that in Group A, 34(70.83%) needs were met and only 14(29.16%) patients needs were unmet whereas in Group B, out of 42 patients only 18(42.85%) needs were met whereas 24(57.14%) patient's needs were unmet. Unpaired 't' test was used to find out the difference in perception of two groups, the two-tailed P value is 0.0001. By conventional criteria, the difference is considered to be extremely statistically significant. It was concluded that satisfaction of the patient is significantly more in group A than group B, i.e. if the patients get consultation and follow-up with the surgeon who is operating upon them.

KEYWORDS: Need, ACL reconstruction, satisfaction, Shadow surgeon.

INTRODUCTION: Undergoing surgery is a very stressful experience. Orthopaedic emergency surgeries are different from elective surgeries, patients have ample time to understand the surgical procedure and their expectations are high since most of the time patients are able to do their activities of daily living and routine lifestyle is not compromised.

Qualitative and empirical evidence indicates that customer satisfaction and service quality are multi-dimensional constructs, whose quality components, together with convenience and cost, influence the customer's overall satisfaction.¹

Patient satisfaction is an important outcome measure because there is a well-documented discrepancy between clinician and patients rating of health status.^{2,3}

So, patients prefer hospital and surgeon of their choice. Not all orthopaedic surgeons perform arthroscopic surgeries because of learning curve and the instruments required to perform them. So, many a times arthroscopist has to go to the patient on demand of the referring general orthopaedic surgeon and perform surgery on their behalf.

STATEMENT OF THE PROBLEM: A comparative study to assess the perceived met & amp; unmet needs of patients underwent reconstructive arthroscopic surgeries by same arthroscopist as himself (Group- A) and as a shadow surgeon (Group B) at selected hospitals of MP during year 2013-14.

OBJECTIVES:

- 1. To assess the perceived met needs of the patients in group A & and B.
- 2. To assess the perceived unmet needs of the patients in group A & and B.
- 3. To compare the difference in the perception of met &and unmet needs of patients in group A & and B.

HYPOTHESES:

H1: there will be significant difference in the perception of met and unmet needs of patients undergoing arthroscopic ACL surgery in Group A and Group B.

METHODOLOGY: A Non-experimental research design in which, the comparison of two groups were done in the present study. All patients who underwent ACL reconstruction during 2013-14 by a single surgeon in the selected hospitals of Madhya Pradesh were included in the study using Non probability purposive sampling. Subjects in Group A includes those go directly consult an arthroscopist and those who are referred to an arthroscopist and was followed up by the same surgeon after the surgery. Subjects in Group B includes those whose surgery was performed by an arthroscopist on behalf of an orthopaedic surgeon without the knowledge of the patient or in other words as a shadow surgeon.

The subjects included in the study were 48 patients in group A and 42 patients in group B. The Tool for data collection was Needs Met Inventory. The tool was designed over the experiences of patients who went through the arthroscopy that is from OPD consultation to post op rehabilitation.

RESULT: There were 48 patients in Group A and 42 patients in Group B. It was found that in Group A, out of 48, 34 (70.83%) patient's needs were met and only 14 (29.16%) patients' needs were unmet whereas in Group 2, out of 42 patients only 18(42.85%) patient's needs were met whereas 24 (57.14%) patient's needs were unmet.

Socio demographic variables of the subjects included in the study in group A and Group B are mentioned in table 1 & 2.

Top 5 perceived met needs and unmet needs of patients, who went directly to an arthroscopist or referred to arthroscopist and followed up by him (Group A) and whose surgery was performed by arthroscopist on behalf of an orthopaedic surgeon without the knowledge of patient (Group B) are distributed in tables 3-6. Perceived met and unmet needs were calculated by computing the mean value.

Unpaired 't' test results:

P value and statistical Significance: The two-tailed P value is less than 0.0001. By conventional criteria, the difference is considered to be extremely statistically significant.

ITEM	f	%
AGE		
15-25	8	16.7
26-35	17	35.4
36-45	15	31.2
>45	8	16.7
SEX		
Female	8	16.7
Male	40	83.3
EDUCATION		
Illiterate	0	0
Intermediate	10	20.8
Graduate	10	20.8
Post graduate	28	58.3
OCCUPATION		
Unemployed	31	64.6
Employed	17	35.4
SOCIO ECONOMIC STAUS		
Low Income group	10	20.8
Middle Income group	33	68.8
High Income group	5	10.4
HISTORY OF PREVIOUS SURGERY		
Yes	9	18.8
No	39	81.2
	AGE 15-25 26-35 36-45 >45 SEX Female Male EDUCATION Illiterate Intermediate Graduate Post graduate OCCUPATION Unemployed Employed Employed SOCIO ECONOMIC STAUS Low Income group Middle Income group High Income group HISTORY OF PREVIOUS SURGERY Yes	AGE 15-25 8 26-35 17 36-45 15 >45 8 SEX Female 8 Male 40 EDUCATION Illiterate 0 Intermediate 10 Graduate 10 Post graduate 28 OCCUPATION 28 Unemployed 31 Employed 17 SOCIO ECONOMIC STAUS 10 Middle Income group 10 Middle Income group 33 High Income group 5 HISTORY OF PREVIOUS SURGERY 9

Table 1: SOCIO DEMOGRAPHIC VARIABLES OF GROUP A

SI. No	ITEM	f	%
1.	AGE		
	15-25	5	11.9
	26-35	18	42.9
	36-45	12	28.6
	>45	7	16.7
2.	SEX		
	Female	7	16.7
	Male	35	83.3
3.	EDUCATION		
	Illiterate	0	0
	Intermediate	18	42.9
	Graduate	12	28.6
	Post graduate	12	28.6
4.	OCCUPATION		
	Unemployed	30	71.4
	Employed	12	28.6
5.	SOCIO ECONOMIC STAUS		
	Low Income group	5	11.9
	Middle Income group	33	78.6
	High Income group	4	9.5
6.	HISTORY OF PREVIOUS SURGERY		
	Yes	8	19.0
	No	34	81.0

Table 2: SOCIO DEMOGRAPHIC VARIABLES OF GROUP B

S. No.	ITEM	MEAN
1	My surgeon told me enough about post-operative rehabilitation protocol	1
2	I have been assured that I am taking treatment from right doctor?	1
3	My surgeon clearly explained to me the results of my investigations?	1
4	My surgeon told me enough about variety of implants, their cost and their advantages and disadvantages	1
5	There was no change in operation proposed & operation executed.	1
	Table 3: Top 5 met need in group A	

S. No.	ITEM	MEAN
1	My surgeon made diagnosis on the basis of history and clinical assessment	0.54
2	I had given the choice of hospital for surgery	0.54
3	My surgery was fixed according to my convenience	0.73
4	My surgeon allowed me to take decision regarding my surgery?	0.92
5	The duration of my surgery was approximately same as discussed with the	0.96
	surgeon	0.50

Table 4: Top 5 unmet need in group A

S. No.	ITEM	MEAN
1	My surgery was done as per the approximate budget discussed	0.74
2	My surgery was fixed according to my convenience	0.74
3	I have been assured that I am taking treatment from right doctor?	0.76
4	I went to my doctor with relevant investigation reports?	0.76
5	My surgeon made a visit to me immediately after my surgery and explained to me what have been done during the surgery	0.76
	Table 5: Top 5 met need in group B	

S. No.	ITEM	MEAN
1	The duration of my surgery was approximately same as discussed with the	0.17
_	surgeon	0117
2	My surgeon told me enough about variety of implants	0.24
3	I had given choice of implant	0.36
4	I have achieved the discussed outcome discussed earlier as per date	0.36
5	My surgeon told me enough about post-operative rehabilitation protocol	0.38
	Table 6: Top 5 unmet need in group B	

APPENDICES:

ITEM	MET (1)	UNMET (0)
PRE HOSPITALIZATION EXPERIENCE		
I visited my regular orthopedic doctor?		
I visited a specialist arthroscopic surgeon?		
1. I have been assured that I am taking treatment from right doctor?		
2. My surgeon listens to me carefully and gives me every chance to talk about my	y	
problems and make me feel ease		

- 3. My surgeon made diagnosis on the basis of history and clinical assessment
- 4. My surgeon asked for investigation to confirm my diagnosis?
- 5. I went to my doctor with relevant investigation reports?
- 6. My surgeon clearly explained to me the results of my investigations?
- 7. My surgeon told me enough about my condition and treatment options clearly
- 8. I have been informed about the option of conservative management
- 9. My surgeon gave me enough information about complications related to disease and surgery?
- 10. I have been informed clearly about the type of surgical procedure and hospital stay
- 11. My surgeon told me enough about post-operative rehabilitation protocol
- 12. My surgeon told me enough about variety of implants, their cost and their advantages and disadvantages
- 13. My surgeon allowed me to take decision regarding my surgery?
- 14. My surgery was done as per the approximate budget discussed

Hospital experience

Pre-operative experience

- 15. I had given choice of implant
- 16. I had given the choice of hospital for surgery
- 17. My surgery was fixed according to my convenience
- 18. My surgery was conducted at scheduled time informed to me?

INTRA OPERATIVE HOSPITAL EXPERIENCE

- 19. The duration of my surgery was approximately same as discussed with the surgeon
- 20. I have been given emotional support by health care provider in the OT
- 21. There was no change in operation proposed & operation executed.

POST OPERATIVE HOSPITAL EXPERINCE

- 22. My surgeon made a visit to me immediately after my surgery and explained to me what have been done during the surgery
- 23. Rehabilitation was started before discharge from the hospital
- 24. I have been seen by a physiotherapist and instructed regarding post-operative rehabilitation
- 25. I have gone through post-operative rehabilitation protocol as discussed previously.
- 26. I have achieved the discussed outcome discussed earlier as per date

Table 7: Needs Met Inventory

DISCUSSION: The present study was conducted to find out the perceived met and unmet needs of patients, those who went directly to an arthroscopist or referred to arthroscopist and followed up by him (Group 1) and whose surgery was performed by arthroscopist on behalf of an orthopaedic surgeon without the knowledge of patient (Group 2).

In group I, majority 16 (38.1%) of the patients were between 26-35 yrs, 34(81%) were male patients, 23(54.8%) were post graduates, 30(71.4%) were employed, 30(71.4%) belong to middle income group and 34(81%) patients had no previous history of surgery.

In group II 19(39.6%) patients belong to 26-35 yrs, 40(83.3%) were male patients, 20(41.7%) had intermediate education, 33(68.8%) patients were employed, 35(72.9%) belonged to middle income group and 37(77.1%) had no previous history of surgery.

When both the groups (group A & B) were compared to find out the difference in the perception about the treatment of patients who underwent ACL surgery under an arthroscopic surgeon or referred to him or by an arthroscopic surgeon on behalf of an orthopaedeic surgeon, it was found a significant difference was found in the perception of met & unmet needs between group A & group B (F= 1.211).

CONCLUSION: Satisfaction of the patient is significantly more if they get consultation and follow-up with the surgeon who is operating upon them.

REFERENCES:

- 1. Pantouvakis A, Bouranta N. Quality and price--impact on patient satisfaction. Int J Health Care Qual Assur. 2014; 27 (8): 684-96.
- 2. Janse AJ, Gemke RJ, Uiterwaal CS, van der Tweel I, Kimpen JL, Sinnema G. Quality of life: patients and doctors don't always agree: a meta-analysis. J Clin Epidemiol. 2004; 57: 653–661.
- 3. Mantyselka P, Kumpusalo E, Ahonen R, Takala J. Patients' versus general practitioners' assessments of pain intensity in primary care patients with non-cancer pain. Br J Gen Pract. 2001; 51: 995–997.
- 4. Kothari, C.R. (2003). Research Methodology Methods and Techniques. (2nd ed.). New Delhi: Wishwa Prakashan Publisher.
- 5. Chandekar Ramesh, (2013). Research Methodology for beginners. (1st ed.). Indore (M.P) Satprakashan Sanchar Kendra.
- 6. Mahajan, B.K. (1999). Methods in Biostatistics for Medical Students and Research Workers. (6th ed.). New Delhi: Jaypee Brothers.

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