

AWARENESS AND PERCEPTION OF PLASTIC SURGERY IN MEDICAL STUDENTS

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ABSTRACT

BACKGROUND

Purpose of this study is to assess awareness and perception of plastic surgery in preclinical undergraduate students.

MATERIALS AND METHODS

92 preclinical students from NKP Salve Institute of Medical Sciences were included in study. Validated questionnaire was given to assess awareness, perception and spectrum of plastic surgery.

RESULTS

There is not much awareness and perception about plastic surgery in medical students. Awareness regarding spectrum and scope is very poor. Generally, plastic surgery is known for burns and cosmetic surgery.

CONCLUSION

Plastic surgery should be included in undergraduate curriculum and every teaching institution should have plastic surgery department.

KEYWORDS

Awareness, Perception, Plastic Surgery, Medical Students.

HOW TO CITE THIS ARTICLE: Mehta J, Shahane PL, Zade M, et al. Awareness and perception of plastic surgery in medical students. J. Evolution Med. Dent. Sci. 2016;5(75):5584-5590, DOI: 10.14260/jemds/2016/1261

INTRODUCTION

The Sushruta was the “father of plastic surgery” and plastic surgical techniques and instruments were known since 500 BC. Even though plastic surgery references are available in ancient text, awareness about plastic surgery in lay people and medical students is very less. In modern world, plastic surgery evolved around 80 years back during Second World War. Now plastic surgery’s scope is increasing because of technological innovation and infinite imagination. But awareness about plastic surgery is still lacking and people many off the times do not know what plastic surgeons do. In practice, plastic surgery provides solution to problems of various specialties. Plastic surgery is based on some sound surgical principles that we apply for solving different problems. Disadvantage of plastic surgery is that it is not region specific; it covers regions from head to toe. Spectrum of plastic surgery is very vast, but only aesthetic aspect of plastic surgery is hyped in media & press.^[1] So we have done present study to assess and evaluate the awareness and perception of plastic surgery in preclinical medical students of M.B.B.S.

MATERIAL AND METHODS

Present study is conducted on first year & second year undergraduate students of M.B.B.S., at NKP Salve Institute of

Medical Sciences & Research Centre. Medical students are supposed to be better informed than lay people, but still they are not exposed to clinical medical science. Survey was conducted with well-validated multiple choice questionnaire. Questions were grouped in three sets with multiple choices. First set was to assess awareness about plastic surgery as a specialty. Second set was to assess the spectrum of plastic surgery. Here, various procedures performed by plastic surgeon were listed along with choice of other specialties. Third set of questions were to assess the perception about specialty. In our study, 92 students from first & second year of M.B.B.S. participated. They were given questionnaire and their choices recorded and analysed.

RESULT

We have grouped questions to assess three aspects of plastic surgery. These are the general awareness about plastic surgery, the spectrum of plastic surgery and the perception about plastic surgery.

More than half of preclinical students [52.18%] were aware of qualification required to become plastic surgeon. 60.87% students think cosmetic surgery is part of plastic surgery. In contrast, only 44.57% think reconstructive surgery is part of plastic surgery. Origin of word plastic surgery was correctly answered by 81.52%. 72.83% were aware that plastic surgery gives minimal scar.

Second set of questions were for assessing the spectrum of plastic surgery vis-a-vis other specialties. Burn & post-burn deformities were only surgeries crossed more than half way mark for plastic surgeon [52.17%], all other surgeries scored less than half way mark. Cleft lip & palate [41.30%], Rhinoplasty [38.04%], Sex change surgery [47.83%], Liposuction [44.57%], Surgery for wrinkles [42.39%],

Financial or Other, Competing Interest: None.

Submission 10-08-2016, Peer Review 02-09-2016,

Acceptance 09-09-2016, Published 19-09-2016.

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DOI: 10.14260/jemds/2016/1261



Hypospadias [21.74%] Facial bone fractures [5.43%], Bedsores & non-healing wound [17.39%], Hand injuries [5.43%] and Abdominoplasty [23.91%].

Third set of questions were to assess perception of plastic surgery. General perception is plastic surgery is expensive [61.96%]. 54.35% consider plastic surgery involves same risk. 58.70% say plastic surgery can be a lifesaving procedure. 61.96% appreciate role of plastic surgery in solving problems of other specialties. Students consider plastic surgery as a growing specialty [67.39%] and it is not restricted to one organ or region [55.43%]. Still only 25% opt for plastic surgery as their specialty.

Table 1: The questionnaire

Plastic Surgery awareness and perception survey in undergraduate students and medical fraternity.

Name: - (optional)

Age: Sex:

Year of Medical education/Department:

- 1) What training is required to become a Plastic Surgeon?
 - a) Three years training in any surgical branch followed by three years training in Plastic Surgery
 - b) Six years training in Plastic Surgery after M.B.B.S.
 - c) Six years training in Plastic Surgery after passing undergraduate degree course in any pathy
 - d) Do not know
 - 2) Do you feel Plastic Surgery & Cosmetic Surgery are the same?
 - a) Yes, they mean the same thing
 - b) Cosmetic Surgery is part of Plastic Surgery
 - c) Cosmetic Surgery is part of Dermatology
 - d) Do not know
 - 3) Do you feel Reconstructive Surgery & Plastic Surgery are the same?
 - a) Yes, they mean the same thing
 - b) Reconstructive Surgery is part of Plastic Surgery
 - c) Reconstructive Surgery is part of General Surgery
 - d) Do not know
 - 4) Why do you think Plastic Surgery is called Plastic Surgery?
 - a) It involves use of Plastic in Surgery
 - b) After surgery face looks shining like Plastic
 - c) Derived from Greek word meaning to mould
 - d) Do not know
 - 5) Do you think after Plastic Surgery operation there are scar marks left?
 - a) Yes, there are scar marks
 - b) No, there are no scar marks
 - c) Minimal scar marks
 - d) Do not know
 - Which surgeries are performed by which specialities?
- If your answer is for more than one speciality then your order of preference
- 6) Cleft lip & Palate
 - a) ENT Surgeon
 - b) Plastic Surgeon
 - c) Oral & maxillofacial Surgeon
 - d) Paediatric Surgeon

- 7) Rhinoplasty (cosmetic surgery of nose)
 - a) ENT Surgeon
 - b) Plastic Surgeon
 - c) Oral & maxillofacial Surgeon
- 8) Burns & post-burns deformities.
 - a) General Surgeons
 - b) Plastic Surgeons
 - c) Dermatologist
- 9) Sex change Surgery
 - a) Plastic Surgeon
 - b) Paediatric Surgeon
 - c) Gynaecologist
- 10) Liposuction
 - a) General Surgeon
 - b) Gynaecologist
 - c) Plastic Surgeon
- 11) Surgery for facial wrinkles
 - a) Dermatologist
 - b) Oral & maxillofacial Surgeon
 - c) Plastic Surgeon
 - d) ENT Surgeon
- 12) Surgery for Hypospadias (abnormal urethral opening)
 - a) Plastic surgeon
 - b) Paediatric surgeon
 - c) Urosurgeon
- 13) Fractures of facial bones
 - a) Orthopaedic Surgeon
 - b) Oral & maxillofacial Surgeon
 - c) Plastic Surgeon
 - d) ENT Surgeon
- 14) Bedsore & chronic non-healing wound
 - a) General Surgeon
 - b) Plastic Surgeon
 - c) Orthopaedic Surgeon
- 15) Hand Injury
 - a) Orthopaedic Surgeon
 - b) General Surgeon
 - c) Plastic Surgeon
- 16) Abdominoplasty (Tummy Tuck)
 - a) General Surgeon
 - b) Gynaecologist
 - c) Plastic Surgeon
 - d) Bariatric Surgeon
- 17) Do you think Plastic Surgery is a very expensive affair meant for rich & famous?
 - a) Agree
 - b) Strongly agree
 - c) Disagree
 - d) Strongly disagree

18) Do you think plastic Surgery is very risky?

- a) Very risky
- b) Risk involved is same as any other surgery
- c) Do not involve any risk
- d) Do not know

19) Do you think Plastic Surgery can be a lifesaving procedure at times?

- a) Agree
- b) Strongly agree
- c) Disagree
- d) Strongly disagree

20) Plastic Surgery is a broad speciality which is mainly a problem solving speciality for other specialties?

- a) Agree
- b) Strongly agree
- c) Disagree
- d) Strongly disagree

21) Plastic surgery scope is ever expanding & speciality is very rapidly growing.

- a) Agree
- b) Strongly agree
- c) Disagree
- d) Strongly disagree

22) Plastic Surgery is not restricted to any particular system, it can involve any organ or system.

- a) Agree
- b) Strongly agree
- c) Disagree
- d) Strongly disagree

23) I would choose Plastic Surgery for specialisation.

- a) Yes
- b) No
- c) Do not know
- d) Not applicable

Question No.	Number of Students					Total
	A	B	C	D	Blank	
1	48	9	6	27	2	92
2	5	56	18	12	1	92
3	24	41	12	15	0	92
4	4	9	75	4	0	92
5	3	16	67	6	0	92
6	16	38	36	2	0	92
7	53	35	2	0	2	92
8	28	48	14	0	2	92
9	44	1	43	0	4	92
10	40	7	41	0	4	92
11	44	6	39	1	2	92
12	20	5	65	0	2	92
13	44	42	5	0	1	92
14	69	16	5	0	2	92
15	45	37	5	0	5	92
16	30	2	22	37	1	92
17	57	16	12	6	1	92
18	20	50	6	14	2	92
19	54	17	14	5	2	92
20	57	8	20	4	3	92

21	62	13	15	0	2	92
22	51	12	25	2	2	92
23	25	17	42	4	4	92

Table 2: Students' Answers

Question No.	Percentage					Total
	A	B	C	D	Blank	
1	52.17	9.78	6.52	29.35	2.17	100.00
2	5.43	60.87	19.57	13.04	1.09	100.00
3	26.09	44.57	13.04	16.30	0.00	100.00
4	4.35	9.78	81.52	4.35	0.00	100.00
5	3.26	17.39	72.83	6.52	0.00	100.00
6	17.39	41.30	39.13	2.17	0.00	100.00
7	57.61	38.04	2.17	0.00	2.17	100.00
8	30.43	52.17	15.22	0.00	2.17	100.00
9	47.83	1.09	46.74	0.00	4.35	100.00
10	43.48	7.61	44.57	0.00	4.35	100.00
11	47.83	6.52	42.39	1.09	2.17	100.00
12	21.74	5.43	70.65	0.00	2.17	100.00
13	47.83	45.65	5.43	0.00	1.09	100.00
14	75.00	17.39	5.43	0	2.17	100.00
15	48.91	40.22	5.43	0	5.43	100.00
16	32.61	2.17	23.91	40.22	1.09	100.00
17	61.96	17.39	13.04	6.52	1.09	100.00
18	21.74	54.35	6.52	15.22	2.17	100.00
19	58.70	18.48	15.22	5.43	2.17	100.00
20	61.96	8.70	21.74	4.35	3.26	100.00
21	67.39	14.13	16.30	0.00	2.17	100.00
22	55.43	13.04	27.17	2.17	2.17	100.00
23	27.17	18.48	45.65	4.35	4.35	100.00

Table 3: Students' Answers Percentage

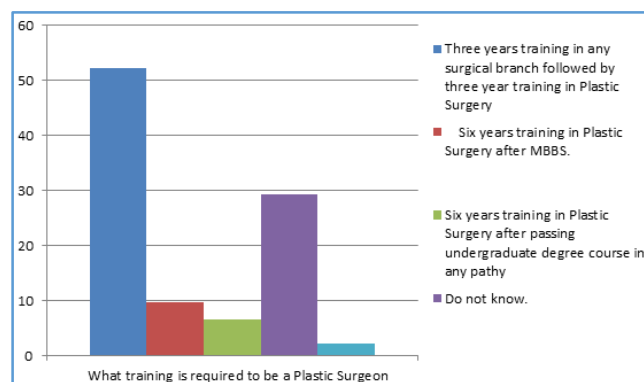


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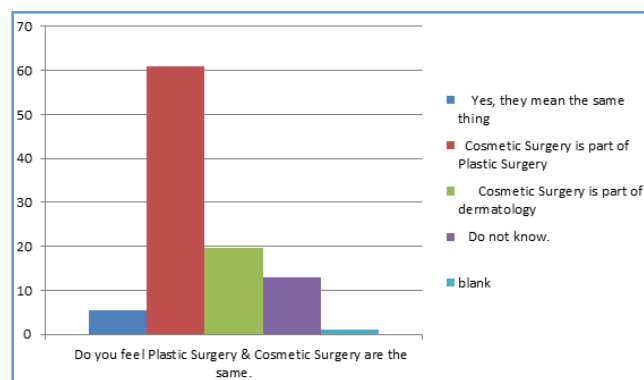


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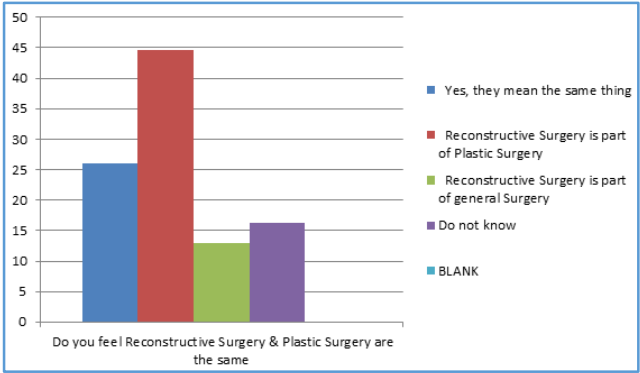


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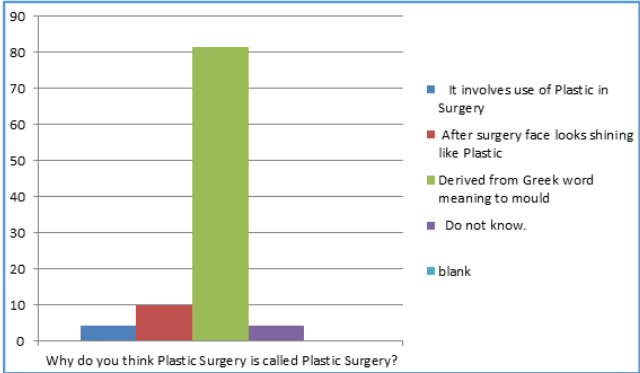


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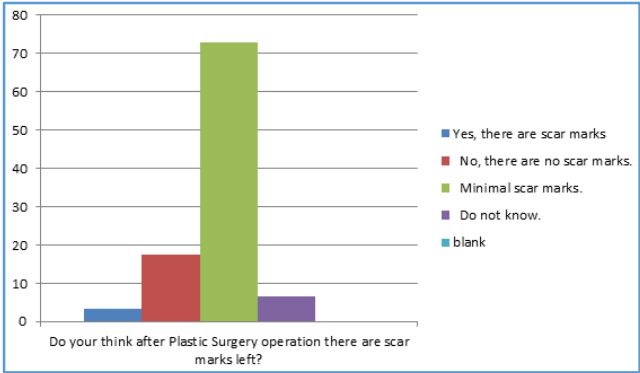


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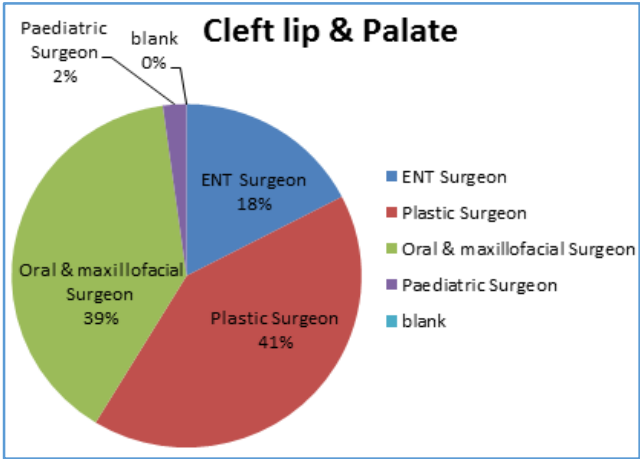


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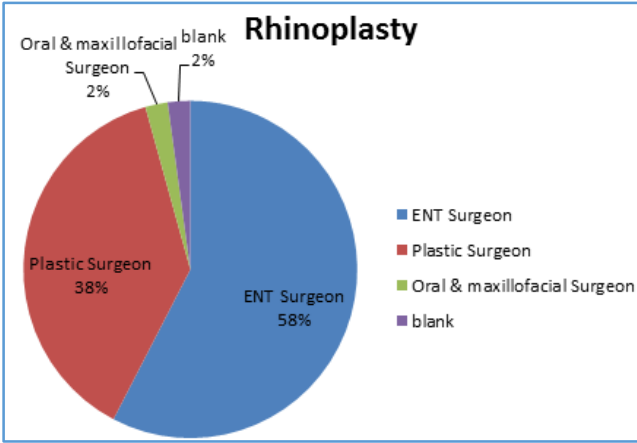


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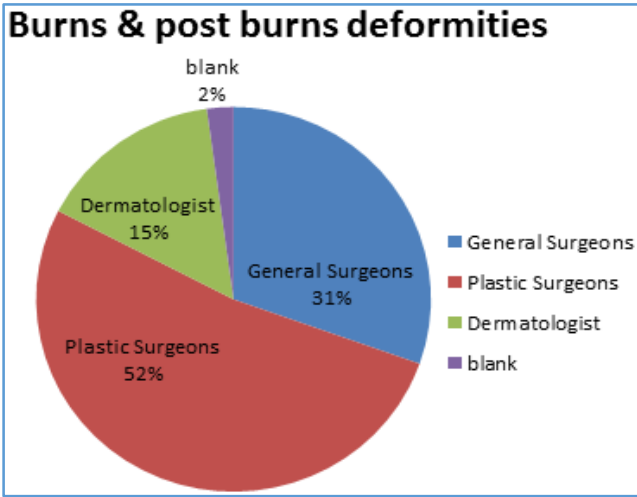


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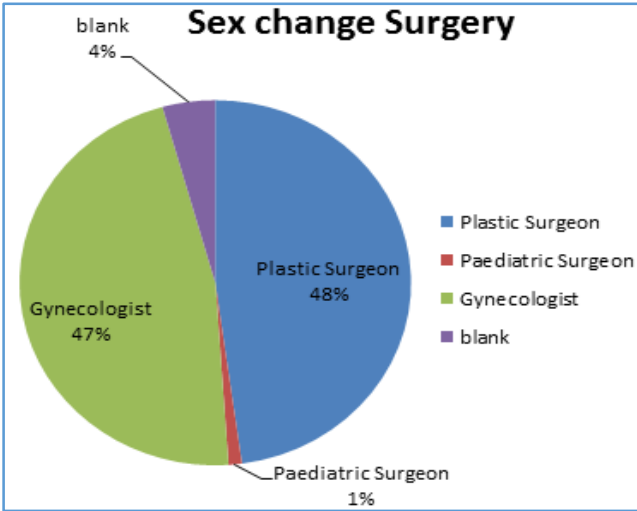


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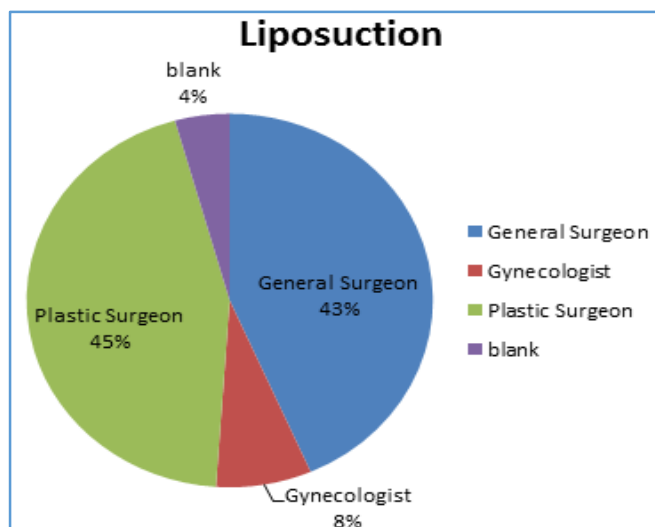


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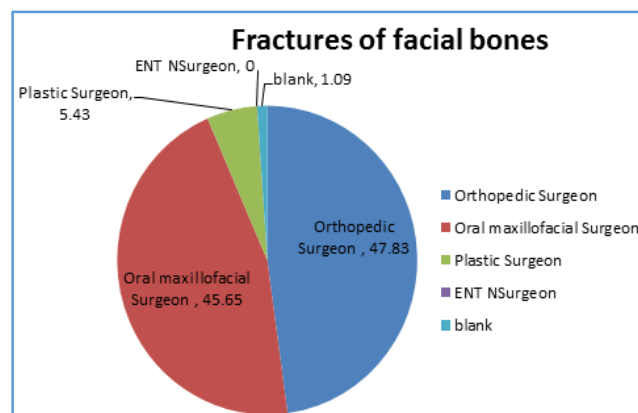


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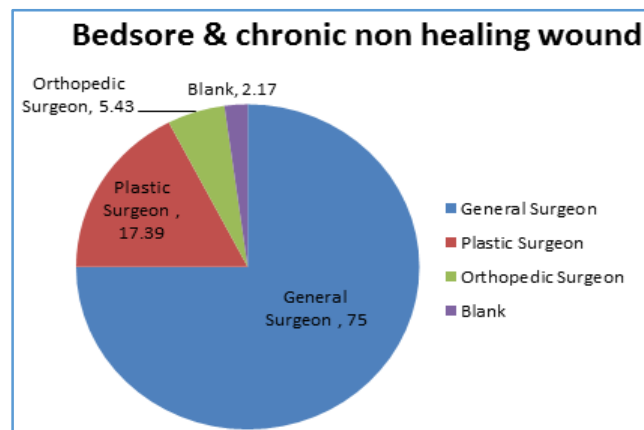


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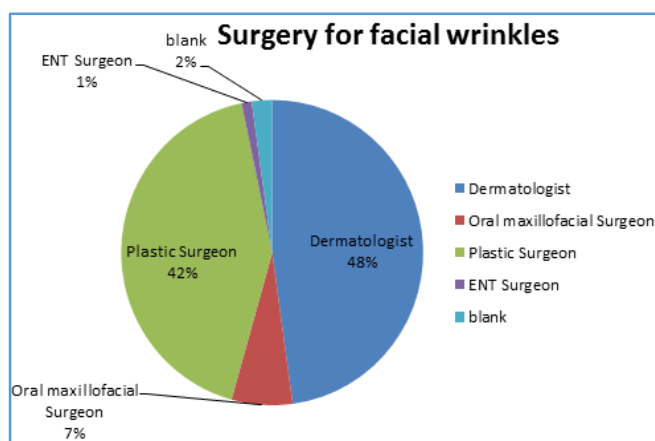


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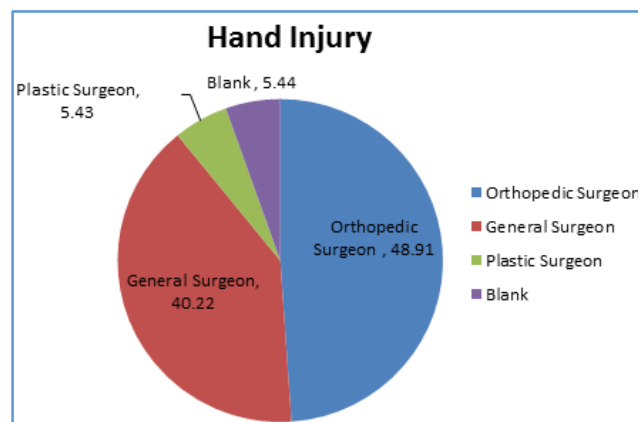


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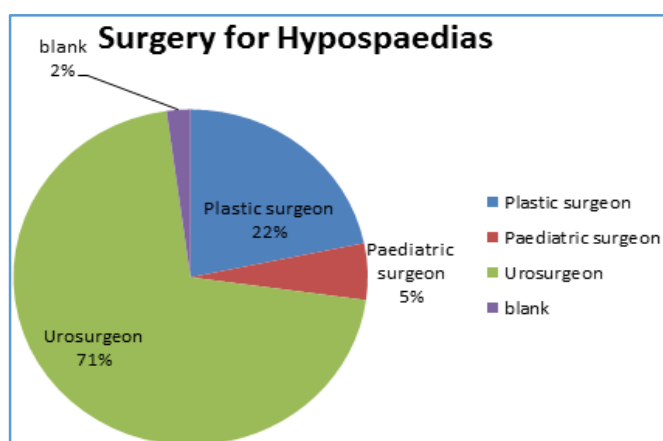


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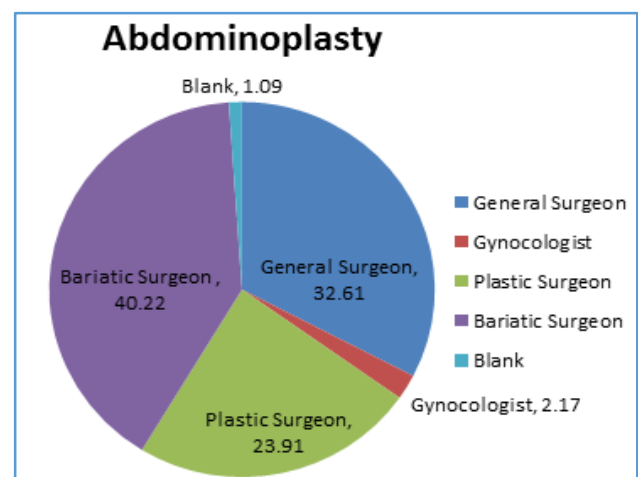


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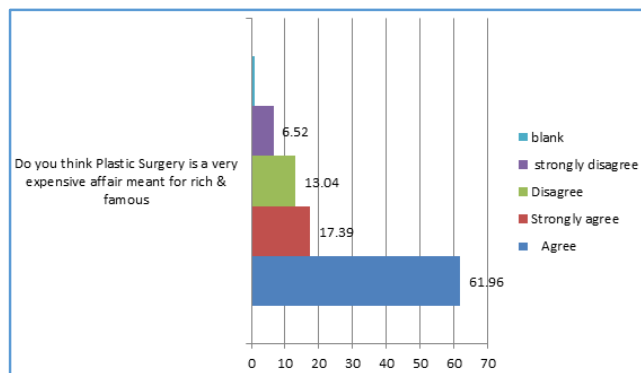


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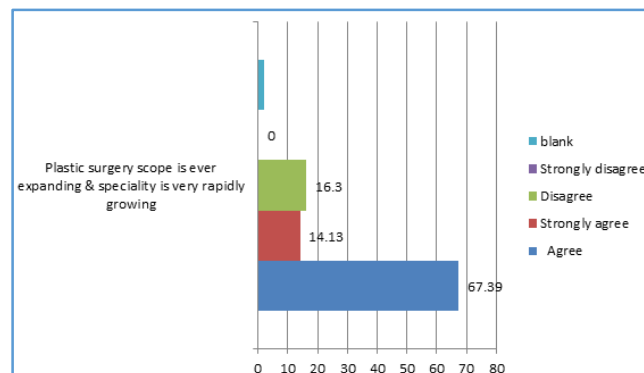


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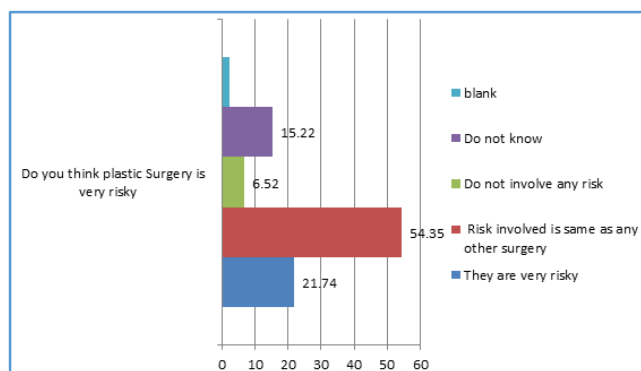


Chart 18

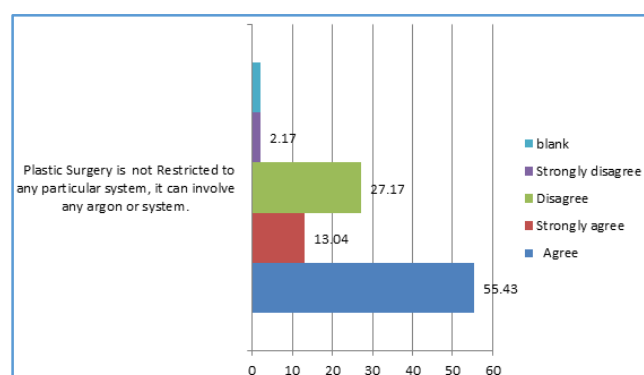


Chart 22

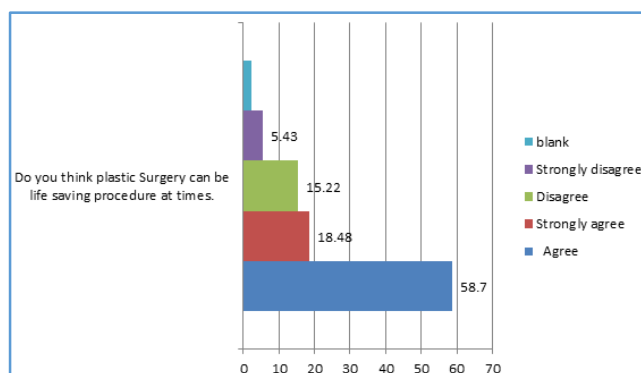


Chart 19

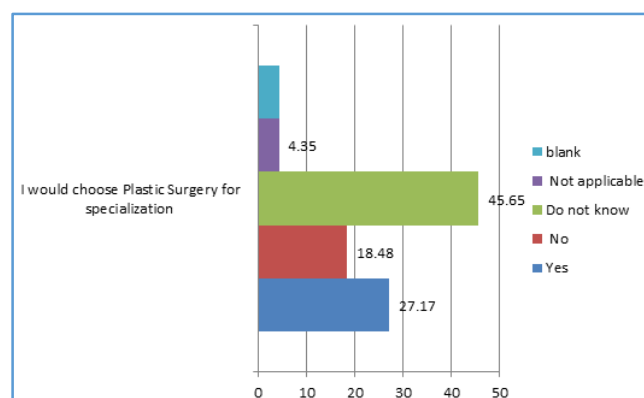


Chart 23

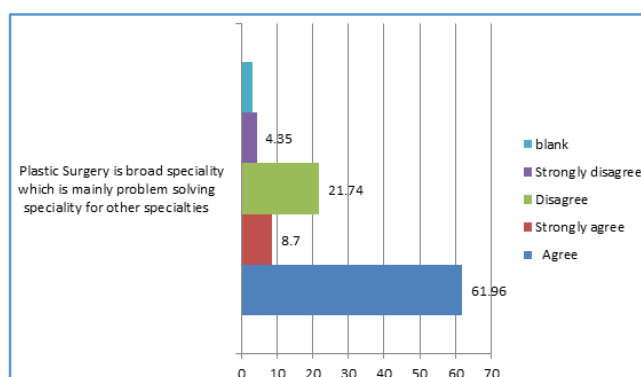


Chart 20

DISCUSSION

In the present study, we have surveyed preclinical medical students. Medical students are supposed to be well informed than lay people. Study shows poor awareness and perception amongst medical students regarding plastic surgery. One of the reasons could be plastic surgery not being a regional specialty. Our survey corroborates this hypothesis; wherever regional specialty was available it was preferred more for performing that surgery. Another reason being name of our specialty is very ambiguous, even though majority is aware of the meaning of the word 'plastic'. Name does not represent scope & spectrum of our specialty. For same reasons British Association of Plastic Surgeon [BAPS] has changed its name to British Association of Plastic, Reconstructive & Aesthetic Surgeon.[BAPRAS].^[2]

Our specialty being super specialty, medical students would be future ambassadors to create awareness in lay

people. To guide them to proper specialty for treatment, we should have plastic surgery curriculum at undergraduate level and it should be properly evaluated. Every teaching institution should have a department of plastic & reconstructive surgery. Curriculum should be designed to include the basic principles on which the specialty is developed and emphasis should be on the spectrum of work done by specialty. So that the future doctor is equipped to guide patient to specialty to reduce morbidity & time.^[3,4,5,6] Our study finding defers from other Indian studies as we have surveyed preclinical medical students and other studies have surveyed medical graduates and medical practitioners.^[7,8] We would like to carry out study amongst interns of medical colleges having a plastic surgery department & no plastic surgery department to confirm our hypothesis.

More than half students know about training required to be a plastic surgeon, but one third are still ignorant about the same. Nearly half of the students consider reconstructive surgery & plastic surgery as the same. Awareness about cosmetic surgery as a part of plastic surgery is there because of media hype. As cosmetic surgery is linked with celebrities it is considered to be expensive.^[1] Around 60% students have perception about plastic surgery vis-a-vis it being as risky as other surgeries, it can be lifesaving, it is a broad specialty whose scope and reach is expanding. Considering reasonable awareness and perception regarding specialty, only 25% would like to pursue career in plastic surgery. We can make our specialty as a major career option, when plastic surgery will be included in undergraduate curriculum.

This has been extensively discussed in western literature. Students would like to have plastic surgery in undergraduate teaching, even though majority may not pursue it.^[9] Plastic surgery being a problem solving specialty and having knowledge of plastic surgery will help other specialty to refer cases earlier, thus reducing morbidity. Media should be utilised to create awareness about reconstructive aspect of plastic surgery. At institute level, multidisciplinary CME symposia are to be organised for undergraduates and postgraduates. Our specialty's philosophy is to think about form, function and aesthetics in management of every problem. This philosophy makes us unique and our approach to problem different from others. This philosophy should be

emphasised in multidisciplinary forum. Our training aims at our philosophical goal, which makes us versatile.

CONCLUSION

In our study of preclinical undergraduate students, we have found that around half the students are aware of plastic surgery. Perception regarding plastic surgery is good in around 60%. Awareness of scope and spectrum of plastic surgery is very poor. We conclude that undergraduates should have plastic surgery curriculum. Every teaching institution should have plastic surgery department. Interdisciplinary and multidisciplinary activities should be carried out to increase awareness about plastic surgery.

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