

Knowledge and perception of plastic surgery among tertiary education students in Enugu, South-East Nigeria

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Abstract

Background: Knowledge, perception, and acceptance of plastic surgery among any population are influenced by channel of presentation. A good understanding of the public awareness will define the way plastic surgery services will be provided.

Aim: To assess the knowledge, awareness of availability, and acceptance of plastic surgery practice in Enugu, South East Nigeria.

Materials and Methods: A questionnaire-based prospective study.

Results: The electronic media is the most common medium of awareness. Less than half the sample knew about the existence of plastic surgeons in Enugu even though a large proportion was aware of the existence of plastic surgery as a specialty. The concentration of plastic surgeons in a center is directly related to awareness of plastic surgery services in that facility. The most common esthetic procedure done by a plastic surgeon in Enugu is tattoo removal and scar refashioning. Orthopedic surgeons are thought to be key players in the management of burn patients as much as the plastic surgeons due to the "SIGNPOST EFFECT."

Conclusion: The level of awareness is high in the sampled population with associated increase in acceptance of its practice and willing utilization. All public hospitals should be encouraged to employ the services of plastic surgeons. Appropriate branding of specialized hospitals where plastic surgery service is available will advance the practice significantly.

Key words: Knowledge, perception, plastic surgery, signpost effect

Date of Acceptance: 16-Oct-2015

Introduction


Modern media projects the idea of youth to the fullest.^[1] Youthfulness, though, is directly related to beauty and power

as defined by current standards of most media followers and sponsors. To maintain a lead and a role in today's social world of the media, outward looks – beauty – must be preserved and improved. Deterioration is equated to failing. The word "Plastic" was derived from Greek word "Plastikos" meaning to "fit for molding."^[2] It is involved in shaping and reshaping to enhance the beauty of body parts.^[2] Plastic surgery comes in handy to fill that need. It

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Access this article online

Quick Response Code: 	Website: www.njcponline.com
	DOI: 10.4103/1119-3077.179293

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How to cite this article: Isiguzo CM, Nwachukwu CD. Knowledge and perception of plastic surgery among tertiary education students in Enugu, South-East Nigeria. *Niger J Clin Pract* 2016;19:327-31.

has indeed enjoyed significant patronage in some parts of the world.

Knowledge and perception of the scope of plastic surgery are low among the general populace in developing world, medical professionals inclusive.^[3-6] A study in India showed that majority of the populace are unaware of the scope of the subspecialty.^[6] Nigeria is not exempt.

There is limited literature on knowledge and perception of plastic surgery in Nigeria. However, a study in Lagos on knowledge and perception of facial plastic surgery^[7] showed that knowledge and perception are poor and has a direct relationship with availability of trained facial plastic surgeons and known facilities for facial plastic surgery.

Even though there are limited numbers of plastic surgeons in Nigeria, the poor knowledge and perception may have contributed to low patronage for plastic surgical procedures compared to those in the Western world.

To move the specialty forward and increase the patronage and access to it, there must be improved or good knowledge and perception. This will be accomplished through various forms of education. Therefore, to be successful there is a need to determine the level of knowledge and perception of the public who will access the services so as to identify current roadblocks and challenges to the awareness of the existence of the specialty. Using a population with likely predictable characteristics (tertiary education students – with a predictable level of minimum education) will make for reproducibility. It will also serve as reference point for future assessments in the downward and upward sides of educational levels.

Medical students were excluded because generally they tend to have a higher level of knowledge and perception of the scope of the specialty compared to the general public.^[6]

Materials and Methods

A questionnaire-based descriptive study among tertiary education students in Enugu namely:

- Enugu State University of Science and Technology (medical students excluded)
- University of Nigeria Enugu Campus (medical students excluded)
- Institute of Management Technology (has no medical school).

The medical students in the two institutions selected were removed from the study because they have active plastic surgery units through which they rotate and received lectures during the period of study. Their presence in the study population may skew the results. They are likely to

have higher awareness compared to the rest of the populace which is actually the target of the study.

The information sought for in the questionnaire covered biodata, general knowledge of the existence of specialty, facilities, procedures, and burn wound management. One hundred and fifty questionnaires were randomly administered. The data were analyzed using SPSS 15.0 (SPSS Inc.).

Results

Sex distribution

A total of 119 questionnaires were returned. Sex distribution was as shown in Table 1 with a male to female ratio of 1.1:1. About 13 respondents failed to indicate their sex and did not indicate their reasons [Table 1].

Age distribution

This is shown below in Figure 1.

Table 1: Sex distribution of the respondents

Sex	No
Male	55
Female	51
No sex	13
Total respondents	119

Table 2: Distribution of respondents by marital status

Marital status of respondents	Frequency
Single	71.4
Married	20.2
Divorced	4.2
Missing	4.2

Table 3: Distribution of hospitals where plastic surgery services are found in Enugu

Hospital	Frequency (%)
National Orthopaedic Hospital (NOH)	22
University of Nigeria Teaching Hospital	5
Enugu State University Teaching Hospital, Parklane	1
Private Hospitals	3.4
Do not know where	43.7

Table 4: Distribution of specialties believed to be involved in burn injury management

Specialty	Frequency (%)
General surgeons	14.3
Pediatricians	4.2
Dermatologists	17.6
Plastic surgeons	22.7
Orthopaedic surgeons	22.7

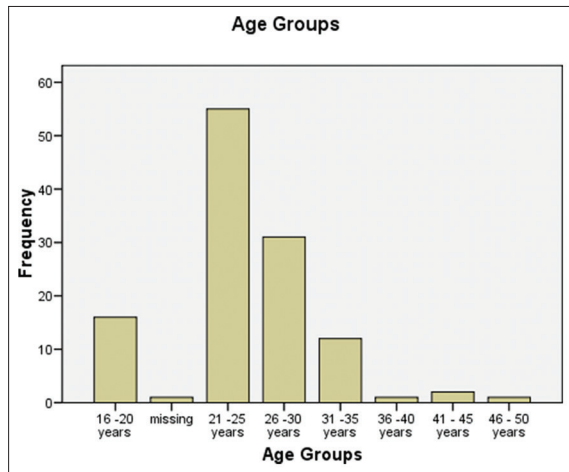


Figure 1: Age distribution of the respondents

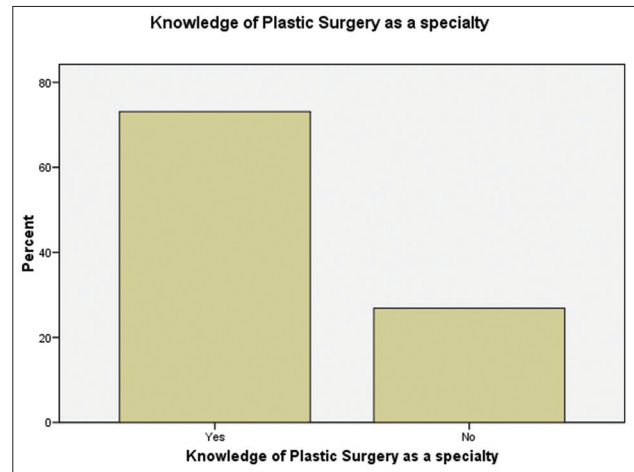


Figure 2: Knowledge of plastic surgery as a specialty of the respondents

The highest frequency was the group 21–25 years which constituted 46.2% of the population while 16–35 years made up 82.4%.

Marital status of the population

The distribution of respondents with respect to marital status showed that the greater proportion was unmarried. This fairly reflects population studied since most of them usually are not married while at school [Table 2].

Medium of awareness of the respondents

Internet (15.7%), friends (15.7%), and television (TV) reality shows (14.8%) were the most common means of awareness about plastic surgery. A combination of two, three, and all four media represented the following proportions 22.2%, 10.2%, and 9%, respectively. The results demonstrate the huge influence the internet and TV reality shows are having on the population’s perception of plastic surgery compared to print media which represented about 9%.

Educational background of respondents

Approximately, 77.3% (92) and 85.7% (102) of the sampled population had their primary and secondary education, respectively, in the urban areas.

Knowledge of plastic surgery as a specialty

More than 70% were fully aware that plastic surgery was a specialty in medicine while 26.9% did not [Figure 2].

Knowledge of existence of plastic surgeons in Enugu

Enugu hosts the highest concentration of burns and plastic surgeon in Nigeria. Surprisingly, only 35.3% of the respondents were convinced that plastic surgeons exist in Enugu city. Over 63% did not know.

Knowledge about availability of plastic surgery services in Enugu

Only about 50% think that plastic surgery services are in

Enugu and out of these, only about 31% respondent knew quite well where plastic surgery services could be found

Location of plastic surgery services

Knowledge of the distribution of hospitals where plastic surgery services are found in Enugu is found in Table 3 below.

Willingness to present for plastic surgery services if indicated.

A high proportion of the respondents (78.3%) agreed that they will subject themselves to plastic surgery procedure if indicated.

Knowledge of plastic surgery procedures

The most common single plastic surgery procedure known to the respondents is removal of tattoos and scar refashioning (24.4%). Breast reconstruction, breast augmentation, facelift, Botox, and rhinoplasty all recorded <5%, respectively.

Need for a purpose built plastic surgery center in Enugu

Eighty percent of the respondents believe that Enugu needs a purpose built plastic surgery center so as to encourage easy accessibility to the services when the need arises.

Knowledge of medical specialties involved in burn injury care

The results in Table 4 demonstrate that the orthopedic surgeons are equally important as plastic surgeons in the care of burn injury cases.

Discussion

Perception is defined by a dictionary as awareness/ consciousness or the insight or intuition gained by perceiving.^[8] Knowledge feeds the process of perception.

Our knowledge and perception of an entity influences our decisions, actions, and acceptance of the entity.

Plastic surgery as a specialty has been difficult for many in the general public to define and appreciate.^[6] As a specialty, its procedures are not confined to any anatomical region or specific techniques. It is entirely governed by principle. However, the perception of many about plastic surgery has largely been influenced by their environment – media and others – not the practitioners.

The characteristics of sample describe the tertiary education student population. The age range, male: female ratio, and marital status are characteristic [Tables 1 and 2, Figure 1].

The most common medium of awareness about plastic surgery practice was the internet and friends with each accounting for 15.7%, respectively, while the reality TV shows trailed behind with 14.8%. The electronic media had become the most influential medium that has shaped the knowledge and perception of the population sample.

The internet and friends (most friends are now online-internet/social networks) took a front roll in our study as against reality TV shows as found in most studies from India and Britain.^[6,9,10] In most studies reviewed, TV and friends were foremost. The access to and availability of internet made possible by mobile telecommunication technology is a plausible explanation for the finding. Most people can access the internet easily for information with handheld devices. Most satellite TV packages available today have stations devoted to esthetic plastic surgery. The movie industry has also made a significant influence on people perception and inadvertently equated plastic surgery to only cosmetic surgery.

Most studies that assessed the knowledge and perception unequivocally identified the role of the media.^[7,9,10] However, most authors have largely missed the solution to the misrepresentation by removing the media in the problem-solving equation. Some have reconfigured the designation of plastic surgeons as well as that of various plastic surgery associations to project the reconstructive component of what we do.^[6,10] Interestingly, this has not solved the problems significantly because the changes were not marketed through the same vehicle of ignorance/poor knowledge and misperception namely the media (internet inclusive). Even though most plastic surgery associations have a website, they need pointers or leads in the commonly visited public websites of the internet that will attract public attention to what we want them to know. This may involve internet adverts with video clips sponsored by the associations. Regular TV enlightenment programs with interactive sessions customized to meet the plastic surgery needs and expectations of any local/regional populace.

Education in urban area may affect the knowledge and perception of the public about plastic surgery because, that is, where the information media and internet are easily and commonly accessible. This may have been the reason why more than 80% knew plastic surgery as a specialty in medicine. However, we cannot categorically state the above since we have not studied the difference in knowledge and perception among a population that had their primary and secondary education in the rural area.

Enugu hosts the highest concentration of plastic surgeons in Nigeria. This may have been responsible for the high awareness that it is a specialty in medicine because it has been closely associated with the health institutions in Enugu [Figure 2]. Regrettably, only a small proportion was convinced that plastic surgeons existed in Enugu. This may be a true reflection of their patronage of their services. This was further substantiated as only about 31% knew where plastic surgery services could be obtained in Enugu namely – National Orthopedic Hospital Enugu (NOHE), University of Nigeria Teaching Hospital, Enugu State University of Technology Teaching Hospital Parklane, and some private hospital [Table 3]. Interestingly, the distribution of the awareness of the presence of plastic surgery practice was found to be directly proportional to the number of plastic surgeons in the hospital, and the length of time that the hospital has offered plastic surgery services [Table 3]. The NOHE has the largest number of plastic surgeons and plastic surgery residents as well as the longest duration of existence of specialty. This study emphasizes the importance of employing the services of a reasonable number of full-time plastic surgeons in most hospitals in Nigeria as a way of helping the public and other medical specialist to assess their services.

Plastic surgery still has an untapped potential in Enugu and buy extension the wider population of Nigeria as shown by the willingness of a significant number (80%) to subject to plastic surgery procedures if indicated. This was matched by a similar conviction that Enugu needs a purpose built plastic surgery center where plastic surgery procedures can be done. The need is emphasized by the trend demonstrated in Table 4 where orthopedic surgeons were thought to manage burns patients as much as burns and plastic surgeons. The reason for this is very clear. The only health institutions in the state that harbors the Regional Burns Center for the South-East/South-South Nigeria is located in a facility named NOHE. Burns and plastic surgery were not reflected in the name of the hospital. Meanwhile, only two medical specialties – orthopedics and burns/plastic surgery – are mainly practiced therein with other supportive disciplines. Orthopedic surgeons have no business with burn injury precisely except if there is accompanying fracture which are not common associations. A layman on the street who has not had any reason nor have a relative/acquaintance treated in the hospital will simply assume that orthopedic surgeons, whose practice is correctly reflected on

the label also manage the burns patients who are commonly sent to the health facility.

The above situation is what I may describe in this paper as "SIGNPOST EFFECT." This describes a situation when the label significantly defines an observer's understanding of an organization in an insufficient or to say the least, defective manner. The name of the hospital should be revised to reflect the activities of the two major surgical subspecialties. Examples of such revisions that capture the need of some specialties are seen in psychiatric hospitals (Federal Psychiatric Hospital), National Eye Hospital, etc. We are, therefore, proposing that the NOHE and Igbobi be revised to National Hospital for Orthopaedic, Burns and Plastic Surgery. This will impact positively on the plastic surgery practice in Nigeria.

This finding should be a motivation for plastic surgeons who have private practices to rightly label them. This is a common practice in the Western world where specialized plastic surgery clinics are named as so. This will further help in improving awareness and accessibility to the teeming population of this country some of whom travel abroad to source for these services at great cost. Furthermore in Nigeria, the names of some hospitals should be revised to capture our subspecialty thereby reducing the impact (financial and others) due to the "SIGNPOST EFFECT."

Conclusion

Plastic surgery is advancing worldwide. The knowledge of plastic surgery as a specialty is remarkably high due to the access to the media, and this is associated with high

acceptance (in the sample) and readiness to utilize its services. The practice in Nigeria should be branded properly to encourage high utilization by the teeming populace.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. Knapp van BD, Ogunbanjo GA. Cosmetic surgery and the practice of medicine. *SA Fam Pract* 2008;50:50-2.
2. Datubo-Brown DD. Plastic surgery. In: Badoe EA, Archampong EQ, da Rocha-Afodu JT, editors. *Principles and Practice of Surgery Including Pathology in the Tropics*. 4th ed. Tema, Accra: Ghana Publishing Corporation; 2009. p. 271.
3. Akpuaka FC. *Stretching plastic surgery to the horizon in Africa*. Inaugural Lecture Series 3. Uturu: Abia State University; 1999.
4. Adigun IA, Oluwatosin OM. Knowledge of the scope of plastic and reconstructive surgery by surgical specialists at Ibadan and Ilorin, Nigeria. *Niger J Med* 2003;12:91-3.
5. Chukwuanukwu TO. Plastic surgery in Nigeria: Scope and challenges. *Niger J Surg* 2011;17:68-72.
6. Pawan A. Perception of plastic surgery in the society. *Indian J Plast Surg* 2004;37:110-4.
7. Adeyemo WL, Mofikoya BO, Bamgbose BO. Knowledge and perceptions of facial plastic surgery among a selected group of professionals in Lagos, Nigeria. *J Plast Reconstr Aesthet Surg* 2010;63:578-82.
8. Perception. (n.d.). *The American Heritage® Stedman's Medical*. Available from: <http://www.dictionary.reference.com/browse/perception>. [Last cited on 2014 Jul 16].
9. Crockett RJ, Pruzinsky T, Persing JA. The influence of plastic surgery "reality TV" on cosmetic surgery patient expectations and decision making. *Plast Reconstr Surg* 2007;120:316-24.
10. Reid AJ, Malone PS. Plastic surgery in the press. *J Plast Reconstr Aesthet Surg* 2008;61:866-9.