Original Research Paper

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General Surgery

ENHANCING SURGICAL PROFICIENCY : EXPLORING CONFIDENCE LEVELS IN GENERAL SURGERY RESIDENTS

Dr. Nishitha Prashanth	Junior Resident , Department Of General Surgery, Rajarajeshwari Medical College And Hospital.
Dr. Sanchita Vijaykumar	Junior Resident , Department Of General Surgery, Rajarajeshwari Medical College And Hospital.
Dr. Hemand Natarajan	Junior Resident, Department Of General Surgery, Rajarajeshwari Medical College And Hospital.
Dr. Srinivas B Kulkarni	Professor, Department Of General Surgery, Rajarajeshwari Medical College And Hospital.

ABSTRACT **Background:** Confidence refers to an individual believing that they can perform a certain skill and competence is the mastery of the skill. Surgical confidence is a critical component of a surgeon's skill set, particularly among surgical residents who are in the process of honing their technical and decision-making abilities. This paper presents a comprehensive analysis of the factors influencing surgical confidence among residents in surgery. **Objectives:** To measure the level of confidence of surgical trainees and surgical graduates The factors that might contribute to it. **Materials And Methods: Study Design:** Prospective study **Study Period:** Ongoing study **Study Centre:** Department of general surgery, Rajarajeswari Medical College And Hospitals **Source Of Data:** All final year surgery residents and graduated surgical trainees across various medical colleges in Karnataka State. **Conclusion:** Confidence refers to an individual believing that they can perform a certain skill and competence is the mastery of the skill. Emergency room postings in general surgery training helps: sharpen skills Gives exposure to diverse cases Helps ensure readiness to urgent situations.To conclude it seems that building confidence among surgical residents is a multistep process and does not solely rely on case load.

KEYWORDS :

INTRODUCTION :

Confidence- What Does It Refer To ?
Confidence refers to an individual believing that they can perform a certain skill and competence is the mastery of the skill.

Surgical confidence is a critical component of a surgeon's skill set, particularly among surgical residents who are in the process of honing their technical and decision-making abilities.

This paper presents a comprehensive analysis of the factors influencing surgical confidence among residents in surgery. It is important to recognize here the difference between confidence and competence.

Aim And Objective

To measure the level of confidence of surgical trainees and surgical graduates The factors that might contribute to it.

MATERIALS , METHODS AND METHODOLOGY:

Study Design: Prospective study
Study Period: On going study
Study Centre: Department of general surgery, Rajarajeswari Medical College And Hospitals
Source Of Data: All final year surgery residents and graduated surgical trainees across various medical colleges in Karnataka State.

Methodology:

A online survey questionnaire done using Google Forms(based on the 2015 Association of American Medical College's Graduation Questionnaire).

Sent to all final year postgraduates and the graduated surgical trainees in the department of general surgery Responses were analysed and comprehended in the form of bar diagrams, pie charts, line diagrams.

Inclusion And Exclusion Criteria:

Inclusion Criteria
Final Year Surgery Residents at present in all the teaching colleges in Karnataka state Graduated surgical trainees with maximum 2 years of surgical experience.

Exclusion Criteria:
All Superspeciality branches

Statistical Analysis:

Data was analysed using - IBM.SPSS (Statistical Package for Social Sciences) statistics software 23.0 version.

To Describe about the data, descriptive statistics , frequency analysis, percentage analysis - categorical variables and continuous variables were used.

RESULTS:

Out of the 100 subjects approached:
70 responded (70%) - 45 were graduates with 1or 2 years experience and 25 were final year postgraduates(FIG.1). 37% were females and rest males(FIG.2) .

The mean age of the respondents was 30.9±2.2 years. Approximately three-quarters of the residents practiced residency where their family lived (78.6%). Around two-thirds of the subjects had started their residency immediately after post graduation (68.3%). Remaining 31.7% subjects :got enrolled in a job (21.7%)or were preparing for a master's degree (10%).

>70% of the residents were confident in performing basic procedures (appendectomy, open inguinal hernioplasties/ herniorrhaphy, hydrocele procedures , piles procedures, varicose veins procedures , I&D's and Simple mastectomies) . (FIG.3).

>42% were confident in performing basic laparoscopic procedures (Appendectomy and cholecystectomy) (FIG.4). >Advanced laparoscopic and complex surgical procedures showed higher aspects of NON-CONFIDENCE. (FIG.6).

88% of the residents were confident of being on call in the casualty. Most beneficial educational activities were:Presentation of cases in the morning rounds -33.9%(FIG.5).. 45% residents stated that a healthy work environment had a positive impact on their confidence when they graduated. residents suppose that they still need more operative exposure to develop their skills. Since trauma is one of the main specialties of general surgeons, it is essential to assess the surgical residents' level of readiness in this area. Considering ward rounds with consultants , a healthy work environment(good support system from colleagues) had a positive impact on a residents confidence , it should be given more importance .

Journal clubs , presentations at conferences all had a positive impact in developing confidence. With regard to gender, pursuing there was no impact on confidence .

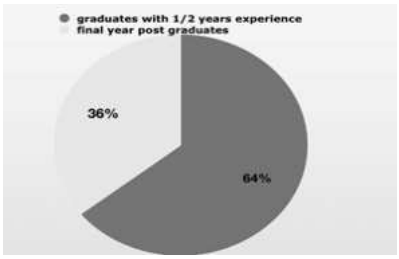
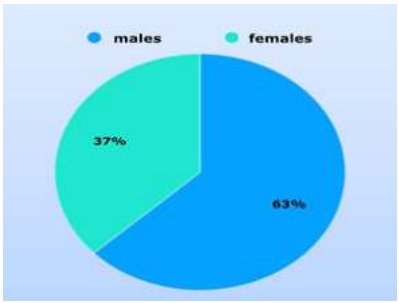


Figure 1



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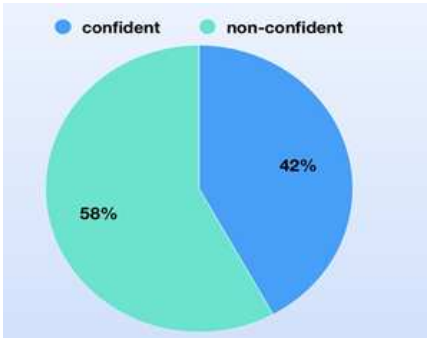

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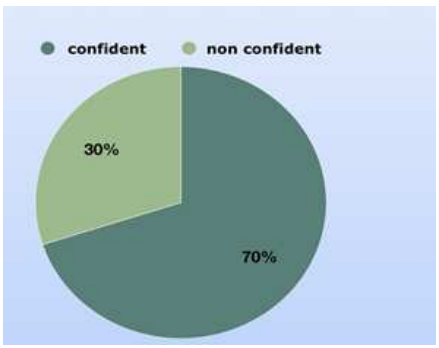

Figure 4

Characteristics	P value
Was surgery your only career option	0.032
Plans of pursuing fellowship	0. 021
Impact of ward rounds	0.023
Healthy work environment	0.045
Presenting in conferences	0.046
Dealing with morbidity and mortality	0.032
OPD Management	0.89

Figure.5

Figure 6

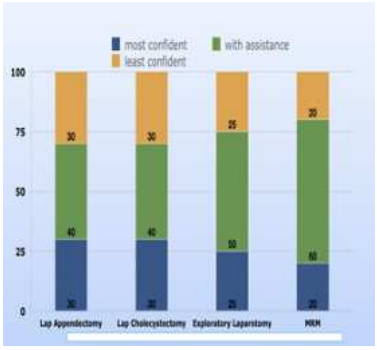

Figure 7

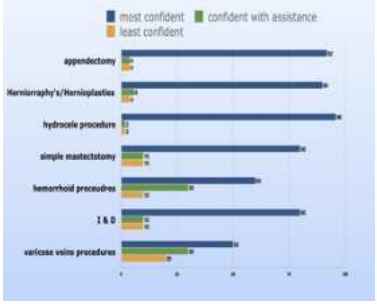

Figure 8

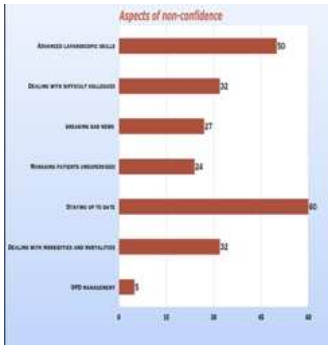

Figure 9

Figure 10

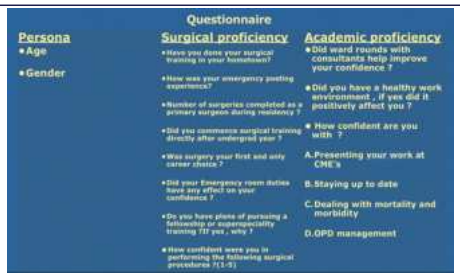

Figure 11

DISCUSSION:

Initially, we anticipated that residents who had finished more patients as the primary surgeon would have greater confidence. The amount of confidence and the number of cases did not correlate, according to our research.. Certain authors have suggested that after completing a certain minimum number of cases, surgical resident's confidence plateaus .

Older age was the only factor associated with a higher number of completed cases during the residency. The degree of confidence remained constant regardless of the quantity of cases that were finished. Reasons for pursuing fellowships could include SSRs feeling that the general surgery field is very competitive. The

CONCLUSION:

It is important to recognise that confidence does not reflect competence, though it is an important aspect of surgical training. Confidence refers to an individual believing that they can perform a certain skill and competence is the mastery of the skill.

Emergency room postings in general surgery training helps:
sharpen skills
Gives exposure to diverse cases
Helps ensure readiness to urgent situations.To conclude it seems that building confidence among surgical residents is a multistep process and does not solely rely on case load.

Take Home Message:

Confidence in a budding surgeon isn't just a trait; it's the cornerstone of their ability to navigate the delicate balance between precision and decisiveness and very crucial in the operating room's high-stakes environment.

Considering most subjects planned to pursue a fellowship surgical training should be shifted to a more modular format that allows earlier and more intense exposure to a residents area of interest .

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