Need of Guidelines and Antimicrobial Stewardship in Pakistan for Perioperative Surgical Practices to Prevent Surgical Site Infections

Sir,

Globally, every year millions of surgical procedures are carried out.¹ Surgical site infections (SSIs) occur at the site of surgery within 30 days or in one year, if any implant is placed.² Nearly 20% of total surgeries are complicated by SSIs.¹ According to the WHO report, about 66% of the developing countries have no published data on SSI. The associated risk factors can be controlled through proper care at the hospital by some guidelines. Four types of guidelines/criteria (CDC, MUST, ASA and KUNIN) may help prevent the SSI incidence. Malnutrition is an important contributing risk factor, and can be predicted through MUST (malnutrition universal screening tool). CDC (center for disease control and prevention) guidelines for classes of wounds, and ASA (American society of anesthesiologists) for physical status indication, would be helpful for the surgeons.³ KUNIN (rational antibiotics grades) is for the assessment of rational antibiotic prescription and might be helpful in the promotion of rational prescription.^{1,3}

The antimicrobial stewardship (AMS) programmes are mainly developed by physicians along with clinical pharmacists.^{4,5} The goal of AMS is to reduce antimicrobial resistance; and ultimately, the patient expenditures and length of stay at the hospital will decrease.¹ The pharmacist interventions for the prescribed antibiotics and drug utilisation review may lead to improved treatment outcomes of the individual patient.⁵ Clinical pharmacists and surgeon's contributions to the therapy can reduce the incidence rate of SSIs.

Although Pakistan is facing a huge burden of infections after surgeries, it is still noticeable how this issue is being ignored.^{1,5} There is severe lack of research studies on this topic. Pakistan is still lacking in terms of effective AMS. The implementation of AMS programmes across the country is a need to prevent the incidence of SSIs in terms of the irrational use of antibiotics from hospitals to patients' homes. Pakistan had launched National Action Plan for Antimicrobial Resistance, but still no fruitful results have been seen; and recently 'antimicrobial resistance' week was celebrated during October 2019. Proper perioperative guidelines along with effective AMS programmes at hospitals across the country

and strict regulations are need of the hour in Pakistan to prevent the high rates of SSIs.

CONFLICT OF INTEREST:

Authors declared no conflict of interest.

AUTHORS' CONTRIBUTION:

FUK: Conceptualised the main theme of this letter and have played major role in the process of writing.

ZK: Helped in the literature review and editing.

AUR: Played key role in the writeup and editing.

YF: Supervised and approved the final draft.

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Faiz Ullah Khan^{1,2,3}, Zakir Khan⁴, Asim-ur-Rehman⁵ and Yu Fang^{1,2,3}

¹Department of Pharmacy Administration and Clinical Pharmacy, School of Pharmacy Xi'an Jiaotong University, Xi'an, China

²Center for Drug Safety and Policy Research, Xi'an Jiaotong University, Xi'an, China

³The Global Health Institute, Xi'an Jiaotong University, Xi'an, Shaanxi Centre for Health Reform and Development Research, Xi'an, China

⁴Department of Pharmacology, Institute of Health Sciences, Cukurova University, Adana, Turkey

⁵Department of Pharmacy, Quaid-i-Azam University, Islamabad, Pakistan

*Correspondence to: Prof. Yu Fang, Department of Pharmacy
Administration and Clinical Pharmacy, School of pharmacy
Xi'an Jiaotong University, Xi'an, China
E-mail: yufang@mail.xjtu.edu.cn*

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