

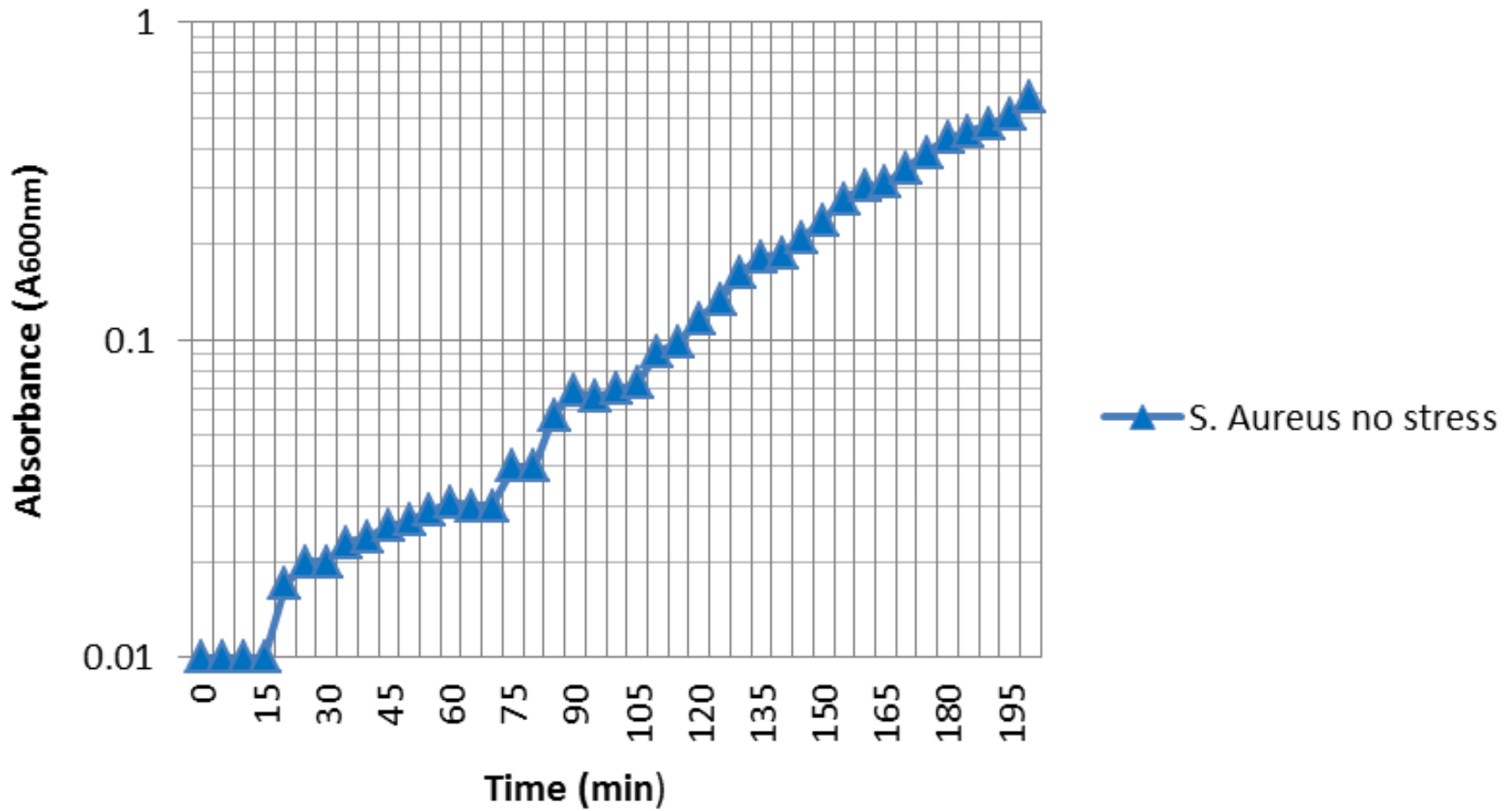
# SALT STRESS AS A DETERMINANT OF BETA LACTAM RESISTANCE IN *STAPHYLOCOCCUS AUREUS*

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Undergraduate Research Project  
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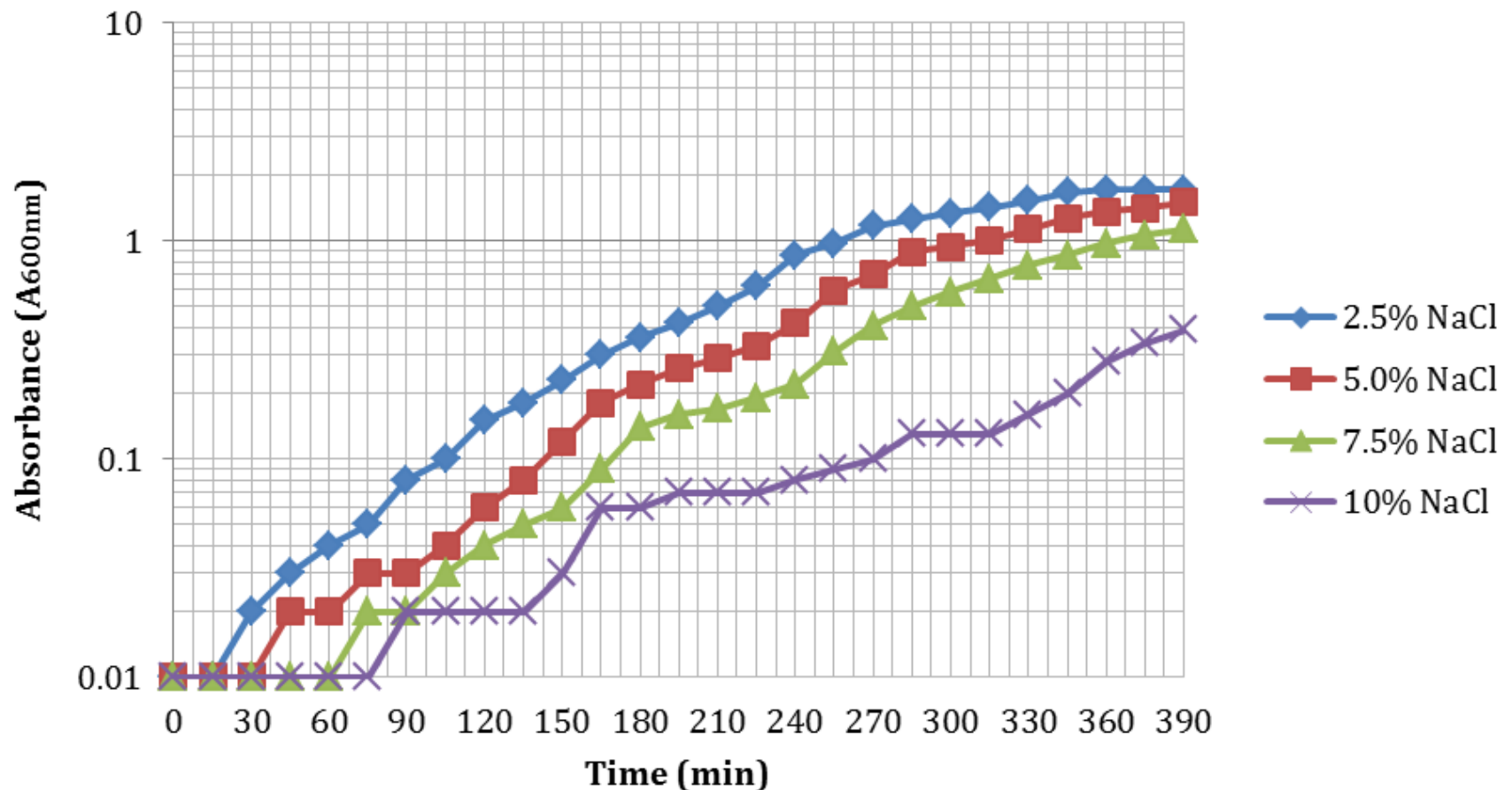
# RESEARCH QUESTION

What effect does prior exposure to salt stress have on antibiotic resistance in *Staphylococcus aureus*?

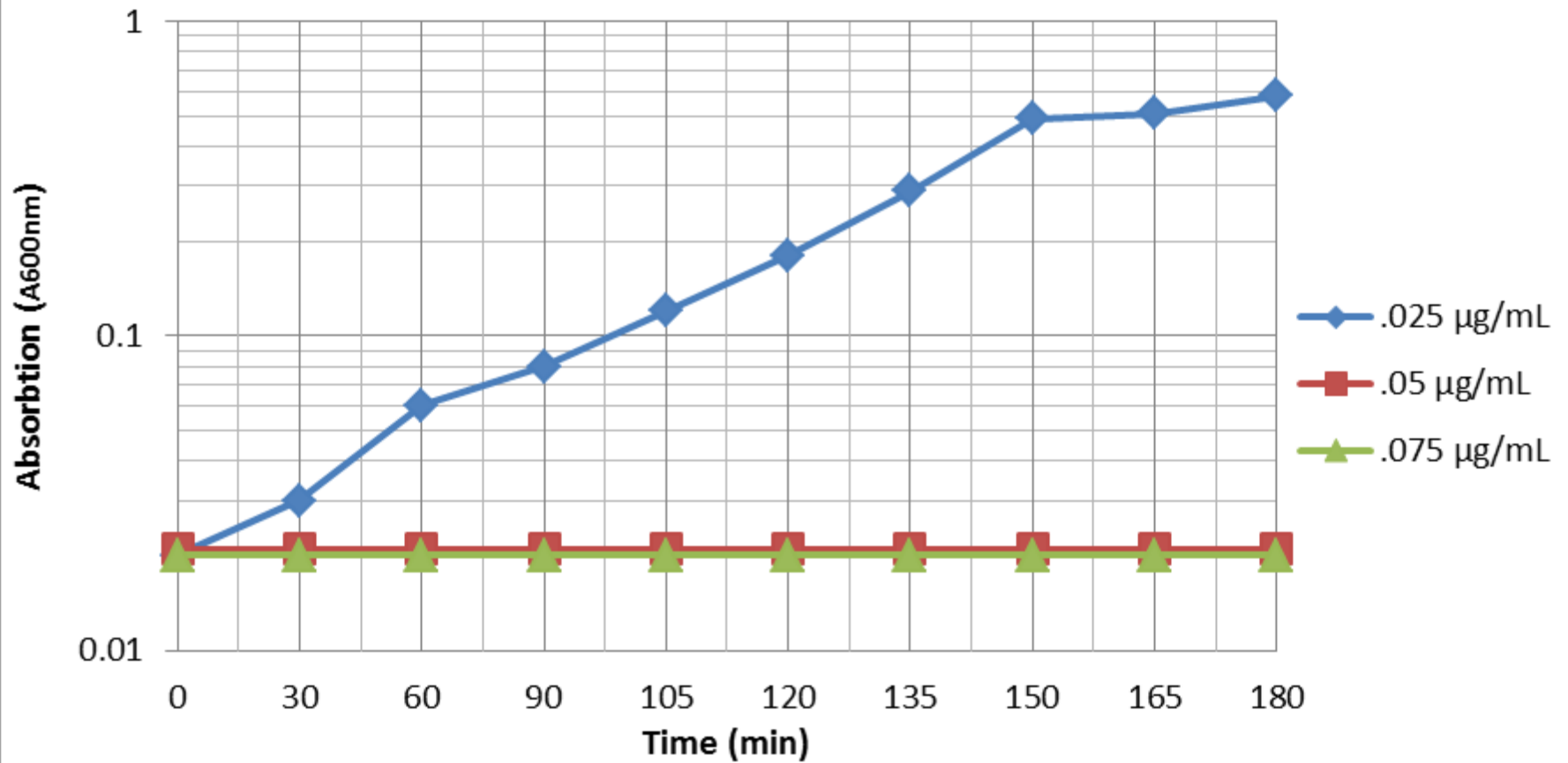
## *S. aureus* in nutrient broth



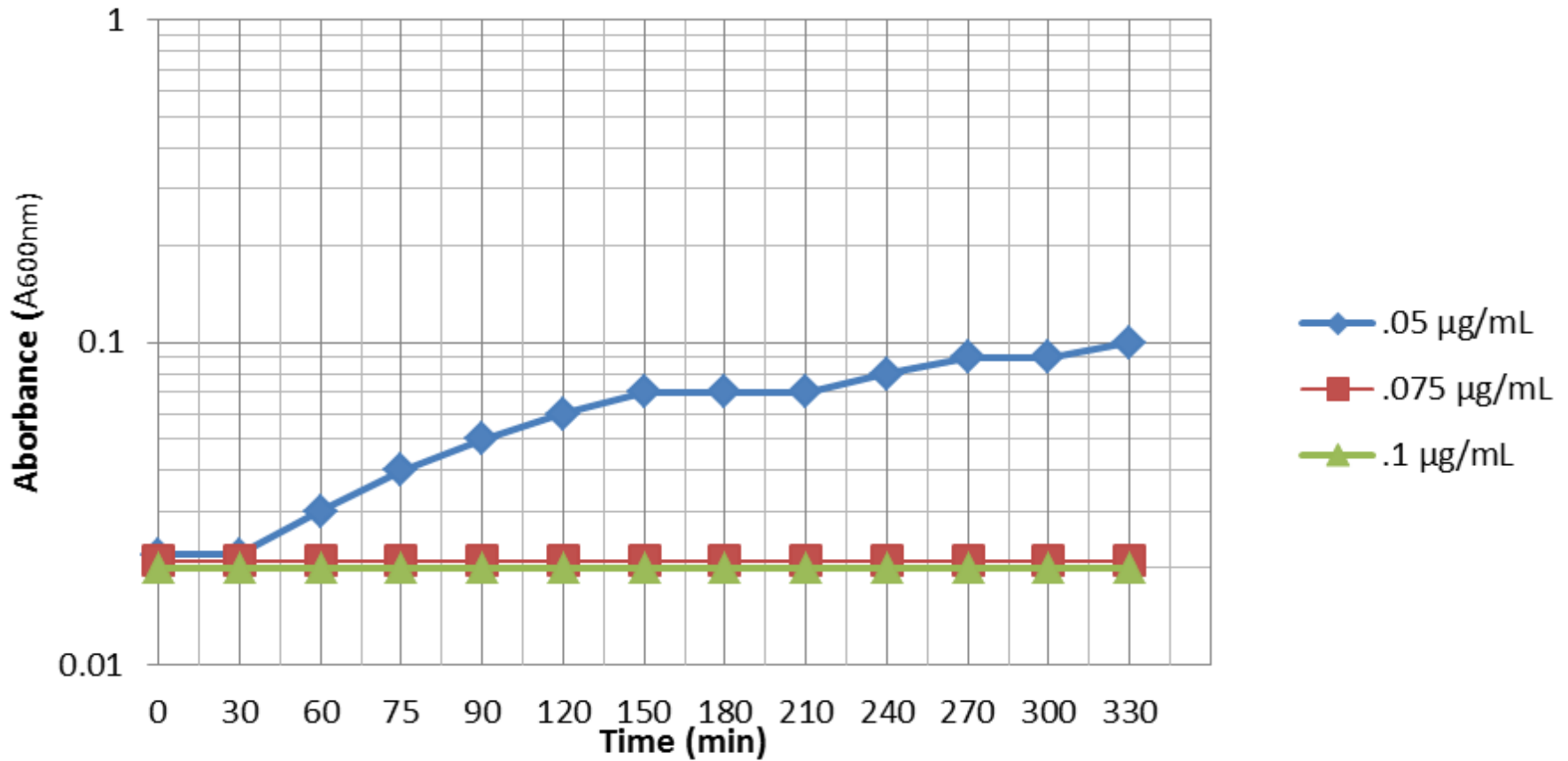
**Fig #1: Effect of Varying NaCl Concentrations on Growth of *S. aureus* in TSB**



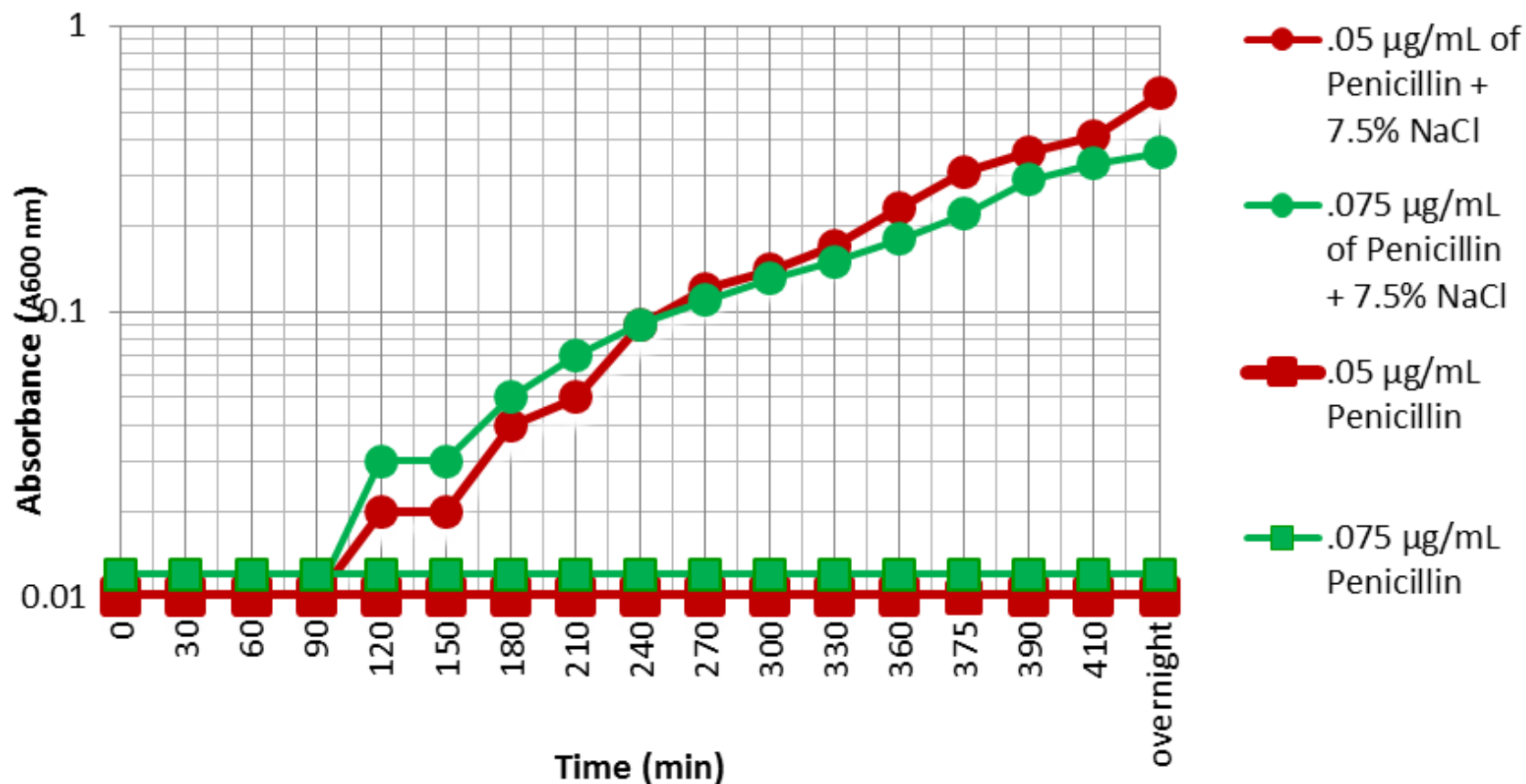
**Fig#2: Effect of Varying Concentrations of Penicillin on Unstressed *S. aureus* in TSB**



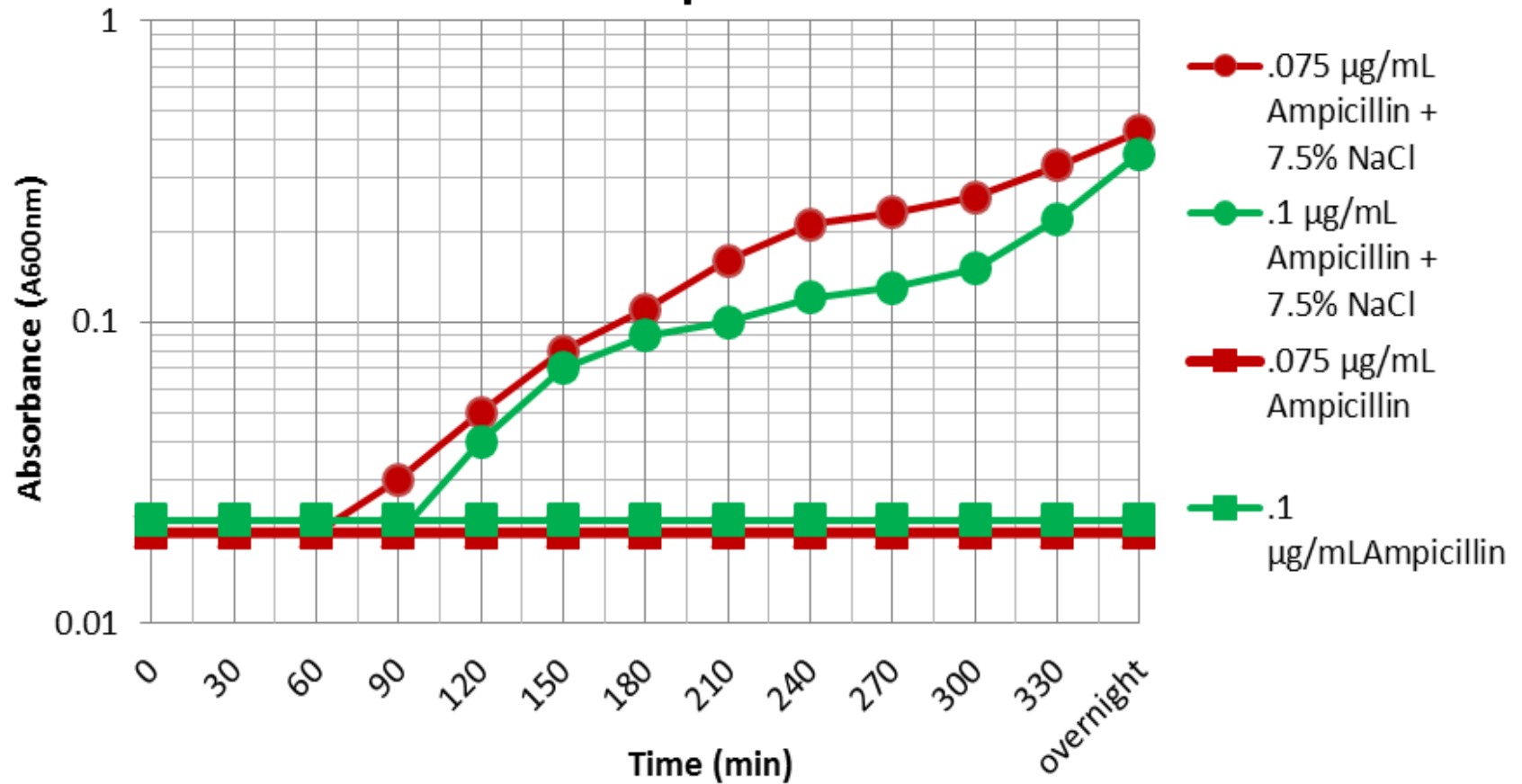
**Fig #3: Effect of Varying Concentrations of Ampicillin on Unstressed *S. aureus* in TSB**



**Fig #4: Unstressed & Salt Stressed *S. aureus* in TSB + Penicillin**



**Fig #5: Unstressed & Salt Stressed *S. aureus* in TSB + Ampicillin**





# CONCLUSION

Previous exposure to salt stress increases resistance to penicillin & ampicillin in *Staphylococcus aureus*.