List of Figures

Figure No.	Title	Page No.
1.1.	Distribution of cause of death among children aged under five years	3
1.2.	Duration and period of seven cholera pandemics	4
1.3.	Factors responsible for antibiotic resistance in bacteria	9
1.4.	Structures of nalidixic acid and some of the fluoroquinolones	11
1.5.	Intracellular action of quinolones	14
3.1.	Agarose gel electrophoresis (1.2%) of triplex PCR discriminates <i>V. fluvialis</i> , <i>V. cholerae</i> and <i>V. parahaemolyticus</i> from each other by producing specific amplicons of 217 bp, 427 bp and 330 bp respectively	66
3.2.	Agarose gel electrophoresis (1.0%) of triplex PCR of <i>Aeromonas</i> spp., <i>V. cholerae</i> BD81 and <i>V. cholerae</i> IDH2365	67
3.3.	Antimicrobial resistance pattern in <i>Vibrio cholerae</i> isolates	68
3.4.	Antimicrobial resistance pattern in <i>Vibrio fluvialis</i> isolates	69
3.5.	Antimicrobial resistance pattern in Vibrio parahaemolyticus isolates	70
3.6.	Antimicrobial resistance pattern in Shigella isolates	71
3.7.	Resistance pattern in <i>Vibrio</i> and <i>Shigella</i> spp. to extended panel of quinolone resistance antibiotics	71
4.1	Expression of <i>qnrVC5</i> , <i>aac(6') Ib-cr</i> and <i>qnrS1</i> genes in the native hosts	83
5.1.	The genetic environment of <i>qnrVC5</i> gene from <i>V</i> . <i>fluvialis</i> isolate BD146	100

Figure No.	Title	Page No.
5.2.	Homology of <i>qnrVC5</i> gene from <i>V. fluvialis</i> isolate BD146	101
5.3.	Structure prediction of QnrVC5 from <i>V. fluvialis</i> isolate BD146	102
5.4.	Expression of <i>qnrVC5</i> and <i>aac (6') Ib-cr</i> genes in the native <i>V. fluvialis</i> host and in <i>E. coli</i> JM109 transformants derived from the plasmids of native hosts.	107
5.5.	Effect of PNA on MIC of ciprofloxacin	108
5.6.	Expression of recombinant QnrVC5 protein	110