

Fig. 11 examines the average data transmission investigation of the proposed MEHRA model under diverse percentage of clusters. The figure portrayed that the CCS approach has failed to display considerable performance by achieving limited count of average data transmission. Meantime, the MCDA and EEEHR methods have displayed moderate and similar results by reaching acceptable count of average data transmission. Finally, the MEHRA approach has provided an improved performance with the supreme average data transmission.

6. Conclusion

This paper has presented a novel MEHRA protocol to resolve energy hole problem in WSN. In MEHRA technique, the entire network is classified into coronas in the network initialization. Then, the coronas are further categorized as sectors with respect to equiangular wedges. When the network is classified as corona and wedges, the HN is selected for all sectors by concerning the distance as well as power. Sensor nodes in applied sector make a chain for communicating with HN. The chain development is initialized from the distance node of HN and each node selects the chain neighbor using greedy approach. Moreover, the HN gathers data from predecessor and respective sector would forward accumulated data to the successor HN till it is received by sink node. A wide range of simulations was performed to ensure the goodness of the presented technique and the resultant values verified the goodness of the MEHRA technique interms of distinct aspects.

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