Expand Rabies Post-Exposure Prophylaxis to Where It Is Needed the Most

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Abstract : Human rabies deaths are underreported worldwide at 55,000 annual cases; more than of dengue and Japanese encephalitis. Almost half are children. A recent study from the Philippines of nearly 2,000 rabies deaths revealed that none of had received incomplete or no post exposure prophylaxis. Coming from a canine rabies endemic country, this is not unique. There are two major barriers to reducing human rabies deaths: 1) the large number of unvaccinated dogs and 2) post-exposure prophylaxis (PEP) that is not available, incomplete, not affordable, or not within reach for bite victims travel means. Only the first barrier, inadequate vaccination of dogs, is now being seriously addressed. It is also often not done effectively or sustainably. Rabies PEP has evolved as a complex, prolonged process, usually delegated to centers in larger cities. It is virtually unavailable in villages or small communities where most dog bites occur, victims are poor and usually unable to travel a long distance multiple times to receive PEP. Research that led to better understanding of the pathophysiology of rabies and immune responses to potent vaccines and immunoglobulin have allowed shortening and making PEP more evidence based. This knowledge needs to be adopted and applied so that PEP can be rendered safely and affordably where needed the most: by village health care workers who have long performed more complex services after appropriate training. Recent research makes this an important and long neglected goal that is now within our means to implement.

Keywords: rabies, post-exposure prophylaxis, availability, immunoglobulin

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