

Abstract

Suspected Chikungunya Outbreak Investigation, District Gwadar Baluchistan Pakistan March 2017

Abdul Sami Khan; A Saeed

Corresponding Author:

Abdul Sami Khan

Abstract

Background: District Health Officer Gwadar reported chikungunya cases to Provincial Disease Surveillance and Response Unit Quetta and requested for an epidemiological field investigation.

Objective: A team sent to confirm, investigate and suggest control measures on 17th March 2017.

Methods: A case was defined as a resident of District Gwadar with history of fever with joints pain within last 03 months (January - March 2017). Active case finding was done from 18th to 24th March 2017. Public and private health facilities were visited to review their records. water storage and sanitation practices for vector identification were assessed.

Results: 684 patients were identified (over all attack rate = 0.25%). 29 blood samples collected and sent to NIH Islamabad, 72% (n=21) were Chikungunya positive. Among patients 50% (n=344) were male and 50% (n=340) females. Mean age was 27 years (range=1-70 years). Most affected age group was 15 to 19 years (14.6%, n=100), 20 to 24 years (13%, n=92), 25 to 29 years (11%, n=76) and 35 to 39 years (9% n=59) with attack rates 0.35%, 0.38%, 0.38%, and 0.45% respectively. 56% (n=382) patients were from Gwadar, 23% (n=161) from Jewani and 21% (n=141) from Pasni with attack rates 0.37%, 0.41% and 0.14% respectively. Investigation revealed that first case was reported on 4th Jan-2017. Being an emerging disease there is lack of knowledge about this disease, its prevention and control among health care providers and community. Sanitation/water storage practices were very poor, larvae of vector also isolated during house hold survey.

Conclusions: Lack of proper sanitation and storage techniques in combination of warmer temperature of this coastal district are most probable causes of outbreak. Awareness sessions among community, district administration and healthcare providers regarding chikungunya, its prevention and control were conducted along with vector control on immediate basis through fogging of reservoirs and internal residual spray (IRS). Surveillance system established for regular reporting.

(*iproc* 2018;4(1):e10628) doi: [10.2196/10628](https://doi.org/10.2196/10628)

Edited by Y Khader; this is a non-peer-reviewed article. Submitted 29.03.18; accepted 29.03.18; published 29.03.18.

Please cite as:

Sami Khan A, Saeed A

Suspected Chikungunya Outbreak Investigation, District Gwadar Baluchistan Pakistan March 2017

iproc 2018;4(1):e10628

URL: <http://www.iproc.org/2018/1/e10628/>

doi: [10.2196/10628](https://doi.org/10.2196/10628)

PMID:

©Abdul Sami Khan, A Saeed. Originally published in *Iproceedings* (<http://www.iproc.org>), 29.03.2018. This is an open-access article distributed under the terms of the Creative Commons Attribution License (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work, first published in *Iproceedings*, is properly cited. The complete bibliographic information, a link to the original publication on <http://www.iproc.org/>, as well as this copyright and license information must be included.