

Project Title: Design and validation of bike-based patient carrier transport system for remote areas of Chhattisgarh.

Status: Submitted

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Description of Project:

Since bikes are widely used by people of all economic background in our country and as compared to 4 wheelers, Bikes, on an average, cost only one-third and can easily reach highly remote areas with difficult accessibility, hence for porting patients from difficult terrains to health centers, use of bike ambulance is proposed. Bajaj Pulsar bike is modeled with additional attachments into a three wheeled patient carrier, the purpose is served at a much lower cost thus making it affordable. The project provides the design, its validation and feedback based design review and modifications.

Executed at NIT Raipur, the project yields the following outcomes:

1. Suggestions for modifications of the existing design
 - a. To improve the stability during motion.
 - b. To improve the suspension, thereby incorporating cost-effective shock isolation mechanisms.
 - c. To account for attachments necessary to support health care while transporting a patient.
2. Redesigning the existing design with provisions for detachability of the patient carrier along with above modifications mentioned under point number 1.

The bike attachment designed and implemented is shown in Fig. 1 below.

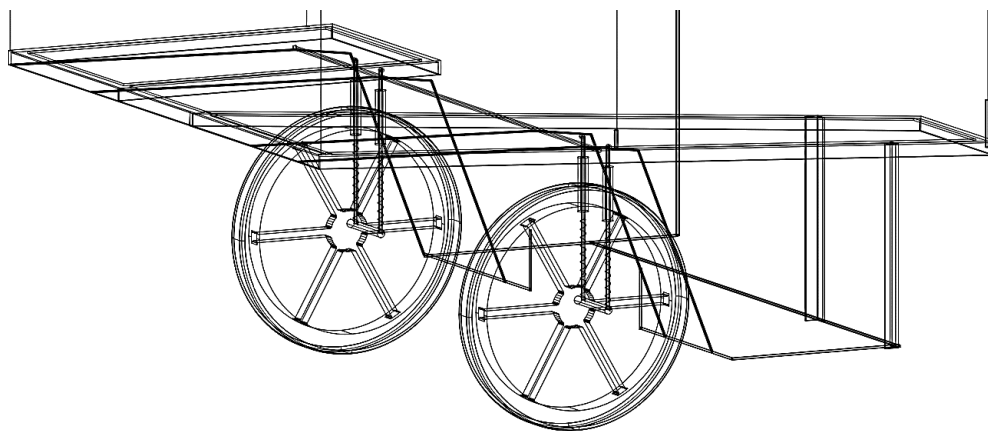


Fig. 1 Bike Attachment implemented in Bajaj Pulsar