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Title: Rapidly fatal acute silicosis among young imitation jewellery workers in india

Dr. Prabodh 14305 Panchadhyayee drprabodh.cnmc@gmail.com MD <sup>1</sup>, Dr. Kaushik 14306 Saha doctorkaushiksaha@gmail.com MD <sup>1</sup>, Prof. Anirban 14307 Biswas docanirban\_biswas@yahoo.com MD <sup>1</sup>, Dr. Arnab 14308 Saha dr.arnab.saha@gmail.com MD <sup>1</sup>, Dr. Santanu 14309 Ghosh santanuonnet@hotmail.com MD <sup>1</sup>, Dr. Rupam 14311 Ta rupumkumarta@yahoo.com MD <sup>1</sup> and Dr. Selim 14312 Mallick selimmallick@gmail.com MD <sup>1</sup>. <sup>1</sup> Pulmonary Medicine, Burdwan Medical College and Hospital, Burdwan, West Bengal, India, 713104 .

**Body:** Background- Silicosis is the oldest recorded untreatable chronic occupational lung disease. Silicosis usually develops after a prolonged period of silica containing dust exposure and their illness is slowly progressive. We found a group of young adults from Burdwan and adjoining districts, used to work at jewellery polishing industries in Mumbai, contracted acute silicosis. There were silicosis cases from other occupations also with different presentations. Methods- It was a longitudinal observational analytical survival study conducted between 2009 -2012. Total 19 silicosis cases were found in 2009-2010, 8 were jewellery polishers and rest were from other occupations. All of them were regularly followed up, after giving best possible treatment to see the course of their illness. Results- Silicosis among jewellery workers developed after 2.93 ± 1.17 years of exposure to dust, contrary to other workers exposure of 10.27 ± 3.19 years.

Affected jewellery workers mean age was 21.25 ±2.60 years while that of other workers 28.36 ±3.61 years. 6 (75%) out of 8 Jewellery workers died during the study period after average 16.5 months of illness, where as other workers had protracted course of illness (28.45 months). Conclusion- silicosis among jewellery polishers is rapidly fatal comparing with other silicosis cases. Concerned authorities must ensure environmental safety norms strictly at those factories.