

UNDERSTANDING ERGONOMIC WORK WAY IN FISHING CATCHING ACTIVITIES FOR LELEYAN UKK POST LELEYAN GROGOL CILEGON

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Abstract – UKK Post Leleyan Grogol Cilegon is one of the UKK Posts under the auspices of Cilegon City Health Office which consists of fishermen workers, who work in fishing. From the results of the discovery and preliminary research data that have been successful can be done to determine whether it is necessary to make improvements with respect to total ergonomics in fishing activities. The ultimate goal of devotion is to provide an understanding of the ILO's ILO implementation regulations. 199 of 2007 in Fishing. The method of implementing this service is giving understanding to the fishermen. POS UKK on the implementation of ergonomic fish work with regard to ILO recommendations No. 199 in 2007 in a fishing prison. Understanding that will be done is to use visualization about ergonomics. Implementing activities will be carried out at the Leleyan Fisheries Village Grogol Cilegon with the assisted partners is POS UKK Leleyan Grogol. From the results of community service found that: there are many who do not know about ergonomics of how to go fishing at POS UKK Leleyan Grogol. After conducting mentoring and extension activities then the research team returns to the destination and provides the necessary equipment to purchase such items.

Keywords: UKK POST, fisherman, fish catching, ILO

INTRODUCTION

Work health efforts of UKK Post cannot be underestimated. The form of community empowerment in the informal worker group, mainly as a preventive measure to protect workers to live healthy and free from health problems and bad influences caused by the work. The UKK Post Principle is: from, by, and for informal worker groups in the community.

The established UKK post must come from the wishes of the workers themselves, of the same type of work and have members of 1 Post Working Unit of 10 to 50 workers. The goal is to upgrade workers' knowledge of occupational health and the ability of workers to help themselves. In addition, occupational health services by cadres, workers and health workers. As well as, the emergence of awareness and preparedness of workers against the risks and dangers due to their work

Benefits of POSK for employee workers where occupational health problems can be detected early. Acquire affordable health care. For healthcare cadres get information early about occupational health. Gain pride for helping others. For Puskesmas to extend the reach of service. Optimizing the function of Puskesmas. UKK Post Leleyan Grogol Cilegon is one of the UKK Posts under the auspices of Cilegon City Health Office which consists of fishermen workers, who work in fishing.

From the result of identification of problem and preliminary research data that have been implemented can be used as a reference to state that it is necessary to do improvement through ergonomic intervention with total ergonomic approach in fishing activity (Manuaba, 2004a).

An ergonomic approach consisting of SHIP (Systemic, Holistic, Interdisciplinary and Participatory) alignment and Appropriate Technology (Manuaba, 2005a) on fishing works. Comprehensively through six criteria that is:

- Technically, the working system can be done by fishermen workers;
- Economically, the price of tool making can be reached easily and cheaply in fishing activities;

- Ergonomically can create working conditions and work environment healthy, safe and comfortable;
- Socio-cultural system of work can be accepted by workers and owners and even communities around;
- Save on energy consumption because it can reduce the workload of fishermen; and the use of such technology is environmentally friendly or environmentally harmless because it does not use toxic materials or explosives.

Work organization improvements include:

- Efficient utilization of muscle power,
- Adjustment of labor supply,
- Rest period settings,
- Taking into account the conditions of information,
- Socio-cultural conditions that still follow ergonomic rules

In addition, it tries to cultivate ergonomics in the fishermen community, so that fishermen are expected to be in a healthier, safer, more comfortable, effective and efficient condition and achieve the highest productivity.

From the results of research ever conducted on the fishermen in the coast of Citilil Cilegon in find some fishermen whose fingers break due to the activities of fishing withdrawal without using gloves and encountered a father who experienced blindness due to exposure to direct and continuous sunlight without the use of glasses. Based on the results of this study eating team implementing community service feels very necessary to provide understanding that important fishermen use equipment-protective equipment with ergonomic intervention.

The purpose of community service is to provide an understanding of the rules of implementation of ergonomic fishing work with respect to the ILO Recommendation No. 199 of 2007 concerning Jobs in Fishing.

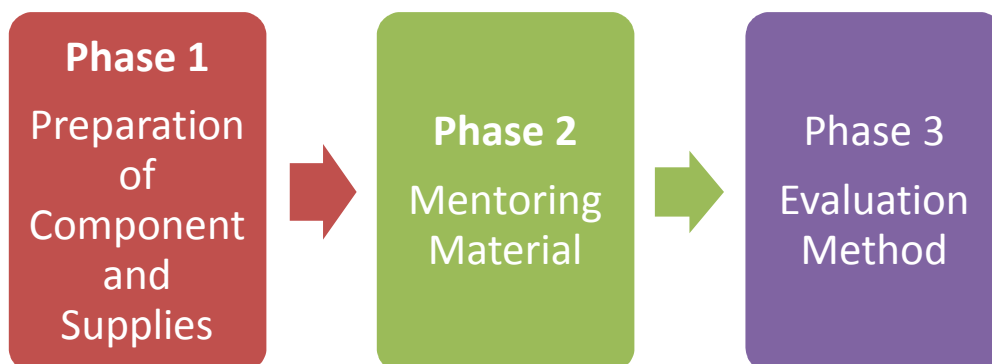
Benefits obtained by target audiences are: 1) improving fisherman understanding of the importance of surviving fishing practices with the Ergonomic approach. 2) increase the knowledge of fishermen about the rights and obligations that will be obtained by the fisherman what if the workers on fishing vessels.

METHOD

Provide understanding to POS UKK fishermen about the implementation of ergonomic fishing work with regard to ILO Recommendation no. 199 year 2007 concerning work on fishing. Understanding that will be implemented is to use a visual display of the importance of the implementation of ergonomic fishing work. Implementation of the activities will be carried out at the Leleyan Fisheries Village Grogol Cilegon with the assisted partners is POS UKK Leleyan Grogol.

Steps of Training

The training due to increasing awareness and understanding ergonomic work way in fishing catching activities for Leleyan UKK Post Leleyan Grogol Cilegon, consisting of 3 stages with details of the process as follows:



Phase 1: Preparation of Components and Supplies

In doing this community service the things that are needed are laptop (Minimal windows 7), Power Point Mentoring Material, LCD, Electric socket

Phase 2: Mentoring Material

The material delivered in this community service are working requirements on fishing vessels (Especially for teenagers), terms of service (services provided for fish catcher workers), the accommodation is ergonomic, and health care, health protection and social security Health care on board

Phase 3: Evaluation Method

After the implementation of extension activities to evaluate whether an understanding of the fishing job regulations has been implemented or has there been a change in attitude towards the regulation? Then the implementing team will make a relocated visit to the partners to see the effectiveness of the mentoring activities.

RESULT AND DISCUSSION

This community service activity was held on 18-19 November 2016 the location of direct implementation on the coast of Tanjung Leleyan, Grogol, Cilegon. And being an audience is a member of the Post Work Health Effort (POS UKK) Leleyan, Grogol, Cilegon. Community service activities are followed by lecturers and students from the Faculty of Engineering and Faculty of Psychology UMB:

Environmental Condition of Target Audience

From the picture it can be seen that the target audience environment has multinational industries that should be able to pay attention to the fishermen.



Figure 1. Target Audience Environments



Figure 2. Beach Condition of Target Audience

Community Service Implementation

This community service activity is carried out jointly with Faculty of Psychology, University of Mercu Buana, Cilegon City Health Office, Association of Occupational Health Doctors of Banten Province, Industrial PT. DOW Chemical Indonesia, and Faculty of Medicine UKRIDA.

Selection of POS UKK location due to POS UKK Fisherman Leleyan Grogol Cilegon which was ca. by Mr. Ibrahim. POS UKK is involved as a distributor of information to fellow fishermen. And willing to be a pilot object of how to catch a healthy and safe fishing. So the counseling about the safe way of fishing is done in this location.

Fishing Problems Found In Locations of Target Audience

From the results of discussions with the fishermen in finding there are some fishermen who have a broken finger caused by not using gloves when pulling the line, so that their fingers Tetanus and broke up. Apart from the absence of gloves this is also due to the ropes of the nets they use are dirty and rusty. Also at the time of the devotion fishermen go fishing do not use black glasses to secure the eyes of fishermen from direct sunlight.



Figure 3. Fishing Activities When Drawing Fishing Rope



Figure 4. Implementation of Counseling

Activity After Counseling

After the advisory and counseling activities, the research team visited the location of the target audience and provided the fishing equipment needed by fishermen such as gloves and gloves as well as jackets for the needs of the sea and also the fishermen have started using the buoy as shown in the picture.



Figure 5. The use of live vest on the sea



Figure 6. Distribution of Black Eyed Glasses on Fishermen

CONCLUSION

From the results of community service found that some fishermen have broken fingers caused by not wearing gloves when pulling fishing lines, so that their fingers are Tetanus and broken. Apart from the absence of gloves, this is also because the fishing lines they use are dirty and rusty. In addition, when the devotion fishermen go to sea do not use the black eye glasses to secure the eyes of fishermen from direct sunlight and found no fishermen suddenly experienced blindness. In addition this is also found that fishermen do not use a buoy at sea.

The extension materials provided during community service are: ILO Recommendation No. 199 Year 2007 concerning work on fishing. After the advisory and counseling activities, the research team visited the target audience location and provided the fishing equipment needed by fishermen such as gloves and gloves as well as jackets for the needs of the sea and also the fishermen have started using the buoy.

REFERENCES

- Adiputra, N., Sutjana, D.P., Widana, K., Manuaba, A., O'Neill. (1998). Participatory Ergonomics in Agriculture, Case study. In Bali Village. Indonesia editors. *Proceeding of 5th SEAES Conference*, 6-7 Nov. Kuala Lumpur: IEA Press P.464.467.
- Grandjean, E. (1993). *Fitting the Task to The Man*. 4 th edition. London: Taylor & Francis.
- Iftikar Z. Satalaksana, Ruhana Anggawisastra dan John H. Tjakraatmadja. (1979). *Teknik Tata Cara Kerja*. Jurusan Teknik Industri, Institut Teknologi Bandung. Bandung.
- Manuaba, A. (2000a). Ergonomi, kesehatan, dan keselamatan kerja, *Prosiding Seminar Nasional Ergonomi 2000*. Surabaya: Guna Widya. h. 1-4.
- Manuaba, A. (2000b). Ergonomi Meningkatkan Kinerja Tenaga Kerja dan Perusahaan. *Prosiding Simposium dan Pameran Ergonomi Indonesia 2000*. Bandung: ITB Press. h. 11-19.

- Manuaba, A. (2003). Aplikasi Ergonomi Dengan Pendekatan Holistik Perlu, Demi Hasil Yang lebih Lestari Dan Mampu Bersaing. *Temu Ilmiah dan Musyawarah Nasional Keselamatan dan Kesehatan Kerja Ergonomi*. Hotel Sahid Jakarta.
- Manuaba, A. (2004). Pendekatan Ergonomi Holistik Satu Keharusan Dalam Otomasi Untuk Mencapai Proses Kerja Dan Produk Yang Manusiawi, Kompetitif Dan Lestari. *Seminar Nasional Ergonomi, Aplikasi Ergonomi dalam Industri, Forum Komunikasi Teknik Industri Yogyakarta dan Perhimpunan Ergonomi Indonesia*. Yogyakarta 27 Maret.
- Nala, N. (1990). *Penerapan Teknologi Tepat Guna di Pedesaan*. Denpasar: Lembaga Pengabdian Kepada Masyarakat Universitas Udayana.
- Pulat, B.M. (1992). *Fundamentals of Industrial Ergonomic*. New Yersey: Prentice Hall. Englewood Cliffs.
- Sanders, M.S. and McCormic, E.J. (1987). *Human Factors in Engineering and Design*. USA: McGraw Hill-Book
- Suma'mur, P.K. (1982). *Ergonomi Untuk Produktivitas Kerja*. Jakarta: Yayasan Swabhawa Karya.
- Sutjana, D. P. (2003). Peningkatan Produktivitas Kerja Penyabit Padi Menggunakan Sabit Bergerigi Dibandingkan dengan Sabit Biasa. *Tesis Program Pascasarjana Universitas Udayana*.