# WORKPLACE HEALTH PROMOTION IN THE COMMERCIAL FISHING INDUSTRY

- A CASE STUDY OF PORT LINCOLN

### Andrea Rona Barclay BSc, MPH



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School of Nursing, Faculty of Health Sciences
The University of Adelaide

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### **Abstract**

### **Background**

Commercial fishing is one of the most hazardous industries as evidenced by international injury data comparisons. Its workforce includes seasonal, self-employed and vulnerable people, often lacking supportive structures. Along with workplace injuries, mental health problems and chronic health conditions have been identified in the literature. Even though there have been calls for health promotion interventions, there is no strategic approach or conceptual framework addressing workers' health and well-being within commercial fishing industries.

This research aimed to understand and describe the commercial fishing industry of Port Lincoln from multiple perspectives and to propose a framework for workplace health promotion interventions applicable to rural fishing industries. The central research question guiding this study was 'How could a pragmatic framework for effective workplace health promotion be structured for use within commercial fishing industries?' This question was addressed by surveying workers and exploring the perspectives of a variety of industry managers and stakeholders in the South Australian town of Port Lincoln, incorporating the sectors of wild-catch, aquaculture and seafood processing.

### **Methods**

This study used a case study methodology that incorporated a mixed methods strategy of data collection and analysis. An integrative literature review of international literature was undertaken; a qualitative study investigated the views of industry managers, stakeholders and health providers; and a survey questionnaire explored the needs and perceptions of the industry's workforce. This mix of different methods highlighted various viewpoints and strengthened the findings by enabling triangulation of data. A realistic and credible range of key factors for an effective workplace health promotion program was thereby identified and a framework created from these findings.

#### Results

An integrative literature review of international literature on fishing industries pointed to high workloads, employment instability, as well as other pressures arising from uncertainties and unstable working conditions impacting on the health and well-being of the fishing industry's workers. Even though these workers are a difficult population to approach with interventions, a need for health support and a call for preventive and health promoting strategies was found throughout the international literature. The systematic search strategy revealed that, to date, no health promotion approach has been developed and implemented within a fishing industry workforce.

Semi-structured, face-to-face interviews with twenty-seven industry managers, stakeholders and health providers gave in-depth insight into the phenomena under investigation. An unstructured approach of supporting workers' health and well-being was identified and industry managers stated an interest in learning more about the possibilities of workplace health promotion. The culture of the industry was described as very competitive, with many psychosocial pressures resting on the workers, relating to low socio-economic background, isolation, the difficulty of maintaining stable relationships while out at sea and economic pressures. High rates of drug and alcohol use as well as mental health issues were described as problematic, with the interviews revealing the struggle of industry managers to deal with these issues. Due to workers migrating to other rural industries the participants also considered health and well-being interventions to be a valuable asset in contributing towards staff retention.

To further explore the workforce needs and from there develop a framework, a survey was undertaken among workers in the various industry subsectors, occupational groups and enterprises. For this purpose, a new data collection tool to survey the fishing industry's workforce regarding their health and well-being at the workplace was created. The survey included 179 participants and revealed a large potential for utilising workplace health promotion programs. Even though the term 'workplace health promotion' was not recognised by workers, they were interested in offers of health promotion and pointed to an array of services they would like to see their workplace provide. Moreover, there were evident benefits to be gained by employers. The survey underlined the large potential of workplace health promotion in keeping staff connected and committed to the industry.

#### **Discussion and Implications**

Based on the evidence of the data, a framework of workplace health promotion for the commercial fishing industry was developed. The DOME Framework of Health Promotion aims at creating a healthy workplace for workers and employers and revolves around the respectful interaction of both. The framework addresses four domains (*DO*) that incorporate an active approach to educating and empowering workers, social and emotional support, modification of organisational arrangements to enable workers to adopt healthy behaviour and engagement with the surrounding community. These domains are guided by principal mechanisms that steer the utilisation and implementation of the framework. These mechanisms (*ME*) are defined as mutual trust, leadership, communication and participation.

It is recommended that this multifaceted approach be presented to regional development boards to support the building of workplace health promotion strategies from within the industry and in collaboration with the community. A culture of valuing and promoting a healthy, qualified and motivated workforce is the primary objective, thereby leading to the improved retention of workers and enhanced productivity. It is suggested that theoretical propositions arising from this research, relating to the application of health promotion principles, can be generalised and the framework transferred to other commercial fishing industries.

**Declaration** 

I, Andrea Rona Barclay, certify that this work contains no material which has been

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### List of Abbreviations

ABS Australian Bureau of Statistics

ASGC Australian Standard Geographic Classification
AFMA Australian Fisheries Management Authority

ASBTIA Australian Southern Bluefin Tuna Industry Association

CWHP Comprehensive Workplace Health Promotion

DigA Diagnose gesundheitsförderlicher Arbeit (Diagnosis of Health-Promoting Work)

DOME Domains / Mechanisms

EBSCO Elton Bryson Stephens Company

EMBASE Excerpta Medica Database

ENWHP European Network of Workplace Health Promotion

FISHP Fishing Industry Survey of Health Promotion
FRDC Fisheries Research & Development Corporation

GP General Practitioner
HNA Health Needs Assessment

HP Health Provider

HREC Human Research Ethics Committee
HW-HF Healthy Workers - Healthy Futures

IM Industry Manager
LGA Local Government Area

NSW New South Wales

OH&S Occupational Health and Safety

PICo Population, Phenomenon of Interest, Context PIRSA Primary Industries and Regions South Australia

PubMed Public Medline

RIRDC Rural Industries Research and Development Corporation Science

SA South Australia

SAWIC South Australian WorkCover Industrial Classification

SBT Southern Bluefin Tuna SCT Social Cognitive Theory

SH Stakeholder

SPSS Statistical Package for the Social Sciences

TAFE Technical and Further Education
THCU The Health Communication Unit

TOOCS Type of Occurrence Classification System

UN United Nations

WHO World Health Organisation
WHP Workplace Health Promotion
WHS Workplace Health and Safety

WRC Workers' Rehabilitation and Compensation

WRIS Work-Related Injuries Survey

### **Glossary**

### **Commercial Fishing Industry**

Overarching term comprising industry sectors of wild-catch and aquaculture, as well as industry businesses of seafood processing and wholesale. Any workplaces directly related to fishing, aquaculture and seafood industries are included and subsumed under the term of 'commercial fishing industry' for the purpose of this study. Supporting industrial sectors such as transport businesses are excluded. Moreover, recreational and indigenous fishing activities are excluded and not part of this research.

#### **Framework**

A supporting structure or a skeleton of interlinked items which may guide the creation and implementation of complex events or interventions, in this case of workplace health promotion. It serves as a guide that can be activated and modified as required.

### Stakeholder

Individuals who have an interest in the health and safety of fishing industry workers, including regulatory bodies; who represent the industry workers or enterprises on a higher level; or who have an interest in the development and sustainability of the industry; as well as experts on the industry.

#### Worker

A person undertaking work within the commercial fishing industry, including hired and seasonally contracted staff, as well as family members and people working for owner-operated businesses.

### **Workplace Health Promotion**

According to the Luxembourg Declaration (European Network for Workplace Health Promotion 2007) the combined efforts of employers, employees and society to improve the health and well-being of people at work. This can be achieved by a combination of improving the work organisation and the working environment, promoting active participation and by encouraging personal development.

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### Conference and Poster Presentations (to date of submission)<sup>1</sup>

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Health Promotion in the Commercial Fishing Industry - Perspectives of Managers and Stakeholders. Oral presentation at the International Commission on Occupational Health: Work Organization and Psychosocial Factors 2014 Congress, 17<sup>th</sup> - 19<sup>th</sup> of September 2014, Adelaide, Australia.

Fishing in the Dark - What are we doing about Health Promotion for Fishermen? Poster presented at the 7<sup>th</sup> Annual Faculty of Health Sciences Postgraduate Research Conference, 29<sup>th</sup> August 2013, Adelaide, Australia.

Keeping it Real: The Paradigm of Realism. Oral presentation at the University of Adelaide, School of Nursing Research Conversazione 2013, 'Beyond the Project', 24<sup>th</sup> - 26<sup>th</sup> July 2013, Adelaide, Australia.

Workplace Health Promotion in Commercial Fishing Industries - A Case Study of Port Lincoln. Oral presentation at the SafeWork SA 2013 Workplace Health and Safety Annual Research Forum, 8<sup>th</sup> July 2013, Adelaide, Australia.

Health promotion strategies utilised in international commercial fishing industries - results of an integrative literature review. Oral presentation at the National Australian Health Promotion Association Conference, 17<sup>th</sup> - 19<sup>th</sup> June 2013, Sydney, Australia.

#### **Awards**

School of Nursing Prize for the best poster at the 7<sup>th</sup> Annual Faculty of Health Sciences Postgraduate Research Conference, 29<sup>th</sup> August 2013.

Bendigo Bank Prize for best poster at the 7<sup>th</sup> Annual Faculty of Health Sciences Postgraduate Research Conference, 29<sup>th</sup> August 2013.

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International Postgraduate Research Scholarship (IPRS) (3 years), 11<sup>th</sup> June 2011.

<sup>&</sup>lt;sup>1</sup> To the date of submission several journal articles were additionally prepared for publication.