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Fisherwomen's Health Issues in Trung Lang Village

Nguyen Thi Tuyet Suong

Introduction

Due to its remote location and adverse environmental conditions, Quang Thai commune is less developed than many other communes in Thua Thien–Hue province. Within the commune, the fishing village of Trung Lang is considered very isolated and poor, compared to the farming villages of the commune. Trung Lang villagers practice various livelihood activities including fishing, small-scale aquaculture and various farming activities. The village consists of three groups of households: the fixed gear fishers (referred as large fishers or $\hat{A}a\hat{u}i$ $ngh\tilde{a}\hat{u}$), the mobile gear fishers (referred as small fishers or $Ti\tilde{a}øu$ $ngh\tilde{a}\hat{u}$), and the farmer-fishers. Even within this poor village, socio-economic disparities between households have been observed and poorest of all are most of the mobile gear fishers who are still living on boats in the lagoon.

It is important to understand the characteristics of the different groups in the community to facilitate the involvement of each group in appropriate activities in development and resource management. Understanding gender issues in the fishing community is also deemed essential since women are the most disadvantaged within the poorest groups (Thuan, 2000; Lan, 1998).

Women participate in a variety of fishing activities and most recently in aquaculture. Women are increasingly engaged in mobile gear fishing to supply their family with the daily needs. Mobile gear fishing is very diverse in terms of gear and practice and is not unique to the mobile gear fishing group. Women from all groups participate in mobile gear fishing. However, the women of the mobile gear group appear to work most intensely in mobile gear fishing activities. Little is known, by fisherwomen and researchers, about the link between fishing activities and women's health however, based on previous research and observation, it was suspected that women suffered from long hours of wading in the water.

Observation and previous work indicated that mobile gear fishers, because of their living situation, seemed to have less access to health services than other groups within commune. It was also suspected that the present situation isolates the mobile gear fishing women from the awareness of and access to education, social aids and services such as the family planning program, training, and loans for income generation.

The aim of this research is to involve the mobile gear fishing women (small fisherwomen) in participatory learning of the impact of their fishing practices on health and of available social aids and services. The first part was designed to learn the negative impact on physical health due to mobile gear fishing activities and to help find solutions. The second part describes women's awareness of and access to social aids and services. The research was initiated by asking the following questions:

- What health problems do mobile gear fisherwomen contract and how do they contract them?
- How do they minimize those problems? What treatments do they apply?
- What is their perception on and utilization of social aids and services?

Literature review

"Gender is a social construction which shapes the roles and relationships of human being across all dimension of activity. It is also one of the key variables defining access to and control over natural resources." (Thomas-Slayter and Rocheleau, 1995: 80).

In all activities, gender plays an important role. Women are responsible for most family activities, *ie*. reproductive work (Binh, this issue****; Lan, 1998). In addition, the low standard of living and reduced fishing catches due to decreased fish stocks, means that women are increasingly engaged in productive activities to supply the family with their daily needs (Lan, 1998).

Gender also determines the roles and responsibilities of men and women in fishing activities. Women generally spend hours wading in the water using pushnet and dragnet, in clam collection and in freshwater macrophytes harvesting for aquaculture feed (Lan, **** this issue). Most mobile gear fishing activities are done by women, either alone (pushnet and clam collection) or together with men (dragnet and aquaculture). In Phu Tan, men often hire out their labour for 'heavier' activities such as farm work and helping aquaculturists harvest their ponds or net enclosures (Binh, ***this issue).

The lagoon project has carried out research in Quang Thai since 1995. Previous research suggests that the fishing community was less organized and less stable than the farming communities (Brzeski and Newkirk, 2000). This is because mobile gear fishers have traditionally led a more nomadic life style and have lost many opportunities to participate in the commune's activities, limiting their access to social aids and services.

Research methodology

During the research, participatory learning and discussions were conducted to collect data and build awareness among the researchers and the community. The following tools were used: focus group discussions, brainstorming, semi-structured interviews, story telling and observation (IIRR, 1998). Initially, a list of the mobile gear fisherwomen and of the mobile gear fishing activities were reviewed from previous studies and validated by the village leader, the leader of the mobile gear fishing group and the leader of the Women's Union.

Focus group discussion and brainstorming

A series of meetings with mobile gear fisherwomen were organized each consisting of training on a subject followed by story telling by a selected woman, after which, all participants provided information and discussed common concerns. To arrange the meeting, discussions were held with the village leader and Women's Union leader about the appropriate date and time for the meetings and asking them to inform and gather the women. The researchers also trained some facilitators. The village leader (man) and women research collaborators organized the meeting with the mobile gear fisherwomen. The meeting began with an introduction by the village leader on the purpose and objective of the meeting.

Three (3) meetings were held consisting of 40 participants. The purpose of the first meeting was to identify the fishing activities. That of the second meeting was to assess impact on physical health and discuss treatments applied for each health problem. The last meeting was used to assess the women's perceptions of social aids and services. For the second and the third meetings, a local doctor was invited to help the women have a better understanding about physical health and health services.

Data recording sheets

During the meetings, the researcher introduced the data recording sheets (see Figures 1, 2 and 3 and Tables 1, 2, 3 and 4), explained them and instructed the participants to record the information. At the same time, questions were asked to validate information and get feedback from the participants. The women collaborators demonstrated by recording their own information and each participant recorded her own information. Illiterate women were assisted by the woman collaborators for recording the information.

Household interviews

This method was used to learn about women's perceptions on the impact of fishing personal health and on access to the social aids. Out of 40 the mobile gear fishing women, 15 women were selected based on their fishing activities. Semi-structured interviews and story telling were used to collect the information. We selected convenient time for them to talk, normally in late morning and early afternoon.

The information was validated and supplemented through the observation by the commune officer, clinic nurse and village leader.

Results and discussion

Mobile gear fisherwomen and their activities

Mobile gear fishers, according to village criteria for classifying production and social groups within the community, do not have any fish corral. The official list of mobile gear fishers provided by the commune government office, recognizes 30 women within the mobile gear fishing households.

Over the course of the research, it quickly became obvious that there were 17 additional households that also earned their living solely by mobile gear fishing. This group of individuals is considered to be mobile gear fishers by the village leader, though not by the commune, yet the fishers themselves didn't feel that they belonged to any group. Most of them were fishing-farming households in debt and not able to pay land taxes and therefore lost their land. They are the most disadvantaged fishing-farming households who, as a result of poverty, are forced to practice mobile gear fishing. This group of mobile fishers saw themselves as outside of the community and, perhaps, were even more disadvantaged then the mobile gear fishers." *I don't belong to any group, so I suffer losses*" (Ms.Vin 2000***).

Therefore, when this situation became apparent, the research was modified to include this group of fisherwomen in the research activities. Thus for the purpose this research, the newly identified group of fishers are considered as the mobile gear fishing women and worked together with the group in this project.

Most of the mobile gear fisherwomen are illiterate and did not attend school – the older ones because of the war and the younger ones (25 to 40 years old) because their families could not afford school fees. Some attended school for a couple of years, however they have since become illiterate. Out of the 40 participants at the meetings, only 10 were able to read and write a little (at the level of grade 4 or 5). Most women could not read posters, pamphlets or books thus limiting their access to information.

In Quang Thai lagoon, the mobile gear fisherwomen engage in 7 fishing methods: dragnet, clam collection, pushnet, gillnet, freshwater macrophyte collection, hook and line, and fish cage culture. Mobile gear fishing is labour intensive and considered more difficult than fixed gear fishing activities (or fish corral fishing).

The impact of fishing on women's physical health

Women reported having the following health problems: gynaecological diseases, hand and foot itch, headaches and earaches, respiratory disease and other problems such as sore eyes, tiredness, and aching bones. Such health problems can be attributed to long time exposure and soaking in the water particularly during periods of menstruation and pregnancy. Although the women were aware that fishing affected their health, they did not fully understand the link between fishing practices and personal health. They were not necessarily aware of the hazards involved in fishing and had never used any effective protective device.

The pie diagram of Figure 1 indicates that perception of the 40 fisherwomen regarding the impact of fishing on their health.

Figure 1. The impact of mobile gear fishing activities on health as perceived by 40 fisherwomen..****

The women believe that environmental factors strongly impact their overall physical health. Of the forty female participants, 56% felt that mobile gear fishing activities had a very serious impact on their health, 37% felt there was a serious health impact from mobile gear fishing and only 7% felt that there was no serious impact from mobile gear fishing on their health. Table 1 and Figure 2 assess in more detail the nature of the impact.

Type of Fishing	# of women	Level of impact by factors ¹ (1: Less serious; 2: serious; 3: very serious)					
		Water depth	Soaking time	Water poison	Weather		
Dragnet	25	2	2.5	2.4	1.7		
Clam Collection	17	2.5	2.1	1	1		
Pushnet	5	1.8	2.1	1.9	1.6		
Macrophyte collection	6	1.6	2.2	2.5	1.7		

Table 1. Level of impact on health by 4 factors involved in the operation of dragnet, clam collection, pushnet and freshwater macrophyte collection as perceived by 40 fisherwomen.

¹ Level of impact was estimated as the average perceived level of impacts of the respondents (# of women).

Figure 2. Level of impact on health by 4 factors involved in the operation of dragnet, clam collection, pushnet and freshwater macrophyte collection (see Table 1)****.

The women reported four types of fishing that impacted on their health: dragnet, clam collection, push net and macrophyte collection. Factors that impact health include water depth, soaking time, water poison and adverse weather. In some cases, the water level reaches up to their necks and they had to dive. They soak in the water for up to 6 to 8 hours per day. Adverse weather includes low temperatures, rain and wind which sometimes prevent them from fishing. Water poison refers to dirt or pollution in water as a result of pesticides from rice field which interrupted their fishing. They easily recognized polluted water by its muddy appearance and an itchy feeling when soaking in it.

Dragnet

In operating dragnet, all factors had an effect but soaking time and water poison were more serious. Of the 4 fishing activities assessed, the dragnet can be seen as unique to this group. "*This activity is practised around the year. It is easy to practice and uses less capital*" (Ms.Yen). If they can not practice dragnet, they change to clam collection. "*Here we work by season. If we cannot practice dragnet, we change to diving for clams.*"(Ms. But, 2000***).

Clam Collection

In clam collection, only 2 factors impacted the women's health: water depth¹ and soaking time. The other factors had less health impact because they did not practice where the water was filled with heavy pesticides from the rice fields or when it was cold, rainy and windy. Women who collect clams, said that their hands

¹ Diving depths can reach up to 4diving depths would be shallower.

I am 45 years old and have one daughter without husband. I practice clam collection since I was very young (12 years old). My family is poor, so I did not got to school. The clam collection was the most miserable work but I don't have any other work, so I have to do it. It is because of the water level – we even dive at a depth of 4-5 arm-lengths¹. If the water goes down (editor's note: at low tide) in the morning, I practice it from 6AM-2PM, and if the water goes down in the afternoon I begin from 1PM-6PM. Alum sticks to my hands and feet and ulcerate my legs. I have to use honey grass and guava leaf to treat. My ears are always painful, even become deaf. Some women have difficulty in hearing. Another hard work after clam collection is that we have to split the shell for easier consumption, so the hands ulcerate. I get pneumonia and often go to hospital in Sia. I also get gynaecological disease, but I seldom go to clinic because whenever there is a campaign, I am often busy would break out in rashes and the skin would begin to itch and peel (eczema).

Pushnet

For pushnet, the soaking time had the greatest impact, then the water poison and the water depth. The weather has less impact on their health because they don't fish in poor weather.

Freshwater Macrophyte collection

They only harvest macrophytes when there is a demand -ie. when farmers ask them to collect macrophyte. It is used as green manure and mulch for rice, tobacco and other cash crops (peanuts, chili and sweet potato). In this group, only about 2 or 3 households have motorized boats and harvest macrophyte using a rake. The rest go out in small boats and dive in the water to collect by hand. Although few people practice it, it impacts their health. Water contaminants or poison have the most severe impact on the women because, even using macrophyte rakes, they have to stand in the boat and the water from the macrophytes made their hands and feet

I am now 62 years old. I have used pushnet for 5-6 years. Practising the pushnet depends on the water level: if the water is at the waist or lower, I can practice it; if the water is up to the chest, I can not push it. I have headache and often get tired". Regarding the examination of the gynaecological disease, formerly, there was no program, it has been just running for 2-3years. Now they examine

I am illiterate. My family has 6 children (4 sons and 2 daughters). I have to practice many jobs: macrophyte and clam collection, and dragnet to supply family. I harvest macrophytes in winter to sell it for tobacco planters, but whenever they tell me. I often go with my husband and my children. I practice it from 5am-12pm. This job makes my hand and foot itchy. This job also need the strength to hold the rake. It weighs from 6-7kg. In addition I also practice the dragnet but not often. It is from 12pm at night to 6am. Night time was very cold, the water is up to the neck. I get gynaecological disease, I have to use medicine but not recover because I have to work

itchy. Diving depth, soaking time and the weather are other health hazards in this occupation.

For fish cage culture, only young freshwater macrophyte plants which are found floating on the surface of the water are used as fish feed so it has less impact to the health. The women help their husband to collect macrophyte and make food for fish. Gillnet fishing also has less impact on health because they only sit on the boat and operate the net with their hands, but they also get cold in winter time. Only one woman used hook and line it and she had no health complaints.

Health problem	# of women affected	Level of severity (# of respondents)				
		Very serious	Serious	Less serious		
Headaches	32	14	13	5		

Gynaecological diseases	30	28	1	1
Respiratory diseases	4	2	2	0
Hand & foot itch	24	5	4	15
Other problems	12	6	4	2

Table 2 lists 4 health problems out of which 3 affect most of the fisherwomen: headache, gynaecological disease and hand and foot itch. Although the number of women who suffer headaches is the highest, gynaecological diseases have the most serious impact to the health of women.

The treatment used for each health problem is indicated in Table 3 and the overall choice of treatment for health problems in general is illustrated by the pie diagram of Figure 3. A brief description of what each treatment entails follows:

- Hospital: visiting the hospital in Hue City (nearly 40 km away) or Sia (10 km away);
- Clinic: visiting the commune's health clinic located 2 km from the village;
- Medicine: purchasing and self-administering medicine from the local clinic or the pharmacy²;
- Traditional: using traditional medicine based on villagers' experience;
- Home: staying at home for several days and interrupting fishing for several days;
- Nurse: inviting a nurse (from adjacent villages of Âäng Cao*** and Âäng Häö) to visit at home.

Table 3. The women's solutions to each health problem

Health Problem	# of women affected	Solution (# of women applying each)						
		Hospital	Clinic	Medicine	Traditional	Home	Nurse	
Headaches	32	3	2	15	0	11	1	

² People working in the local clinic sell medicine privately from a hired booth in the local market. It is considered as the local pharmacy.

Gynaecological diseases	30	2	23	0	1	4	0
Respiratory diseases	4	1	1	2	0	0	0
Hand & foot itch	24	0	1	18	1	4	0
Other problems	12	1	1	3	1	6	0

Figure 3. General solutions to health problems (from the average of Table 3).

In terms of health care, women go to the clinic, purchase and self-administer medicine from the local pharmacy and rest at home for several days.

During the discussion, the doctor was invited. At the beginning, women felt shy. But when the doctor talked about the problems in a serious manner and with convincing words, they began to speak about their problems. Regarding birth control, they had many questions:

- "Can we take a pill to avoid pregnancy?"
- "I heard that using birth control will cause cancer. Is it right?"
- "Does it cause problems to the body if I take the pill everyday?"
- "Is it possible to be pregnant at my age?"

In his answers, the doctor used convincing arguments, and they listened and agreed with the doctor's words. For example:

"Having many births is not good. Your health will decrease, and you will look older than your age. Also it impacts on the family economy. You have to work hard, but it is not enough to supply all your children. You don't have money to send children to school." (Doctor, 2000)

The doctor helped them better understand birth control and how use it safely and how to take care of their health during pregnancy.

Women were especially shy to discuss gynaecological diseases, however, as they became more comfortable and understood and believed the doctor, the women began to complain about itchiness and vaginal discharges after working for long periods in the water. The women had many questions:

- "Why do we get itchy after spending a long time in the water?"
- "Why are there vaginal discharges?"
- "Why does it hurt?"

The doctor explained about gynaecological diseases and recommended that women should not go into the water during their menstrual period as this was a period when the mucus membrane of the uterus can be

easily infected. Also, it was suggested that women go to the clinic to get medication that would treat vaginal infections as soon as they felt itchy or saw a vaginal discharge. The doctor emphasized the importance of getting treated immediately otherwise it would affect their general health and strength.

Headaches were discussed a little bit. When women get a headache, they take a pill or stay at home. To prevent headaches, it was suggested that when the sun is very bright, for example around noon or when the temperature is very hot, women should avoid wading in the water.

Social aids and services

According to the commune officers, the following social services and aids were available for anyone in the community: family planning, poverty alleviation, literacy, aquaculture support, vaccination, and settlement.

Family planning is routinely available for one day every three months when one doctor and one nurse visit the commune clinic. All women of reproductive age can receive condoms, the pill or have a diaphragm fitted for free. However these services are provided on a "first come, first served" basis as there are not enough supplies for the entire commune."*I often go to clinic when I hear the announcement, but it is very difficult to get it. Giving medicine does not reach our group. In whole group, only 5-6 women get it*". (Ms. Rap).

There is one poverty alleviation program working through the Commune Women's Union that provides money for business development and livestock raising to improve the livelihoods of women. Women are required to write an application for a loan so obviously, it is biassed towards literate women. The leaders of the Women's Union (at the commune and village levels) approve the loans based on who they considers would be able to re-pay the money which can be up to one million VND per family to be returned in 2 years. There are only 150 households out of 450 households in the commune who have the capacity to apply for the loan and only a few loans available therefore, not many women can access these loans.

A vaccination program is provided once a month at the health clinic for children under one year of age and for pregnant women. This program is free and there is enough vaccine for everyone. In support of this program, the doctor explained that it was necessary:

"The State gives vaccinations to prevent children from contracting disease and spend a lot money buying or producing them. Taking them is simple work but you will get a big benefit later. It help children avoid dangerous diseases which can sometimes causing death." (Doctor, 2000)

The commune has a policy to support to the settlement of sampan people (those still living on boats) on land. They have applied this policy and have offered 150 m^2 to each household but the sampan people have refused to move because the location is far from the water area they are familiar with and where they earn their living. Although some may wish to settle, they also don't have enough money to build a house³.

Aquaculture support has been accessible to villagers for 2 years. The support is provided by the provincial fishery company, a sub-division of Department of Fisheries (DoF) in the form of interest free loans. Families received from 150 000 to 600 000 VND each for one year. The loans returned are re-circulated

³ In April 2001, 20 households accepted their land allocation with a small support of 2.7 million VND from Government Program # 773 on sampan settlement). The commune is asking for more funds to extend the support to other families (Mr. Vinh***, chairman of Quang Thai Commune, pers. comm., 2001).

within the village. In addition, the mobile gear fishers got the support from the project (Viet *** this volume). In 1999, 24 mobile gear fishing households benefited the latter.

Officially, according to the commune officer, there is a literacy program however, it is not yet operational.

Each of the 40 participants filled out a data recording sheets that allowed them to discuss their perception of social support in the community. The women's perception of each social support and aid differed as indicated in Table 4.

Perception	Family planning	Poverty alleviation	Vaccination	Settlement	Aquaculture
Awareness ^a	Yes – 80%	Yes – 100%	Yes – 95%	Yes – 100%	Yes – 100%
Agency ^b	Gov – 100%	Gov – 85% No idea –15%	Gov – 100%	Gov – 100%	Gov – 100%
Availability ^c	No – 100%	No – 90%	No – 100%	Yes – 100%	No – 100%
Convenience ^d	Inconv – 63%	Inconv – 55%	Inconv – 100%	Conv – 100%	Conv -100%
Importance ^e	No - 60%		Imp – 80%		Imp – 100%

Table 4. Women's perception of social support available in the community

^a Have you ever heard of or are you aware of the support? (Yes or No)

Note: Being aware does not mean that women necessarily understood what that support service was.

^b Who offers or organizes the support (Gov = Government, cooperative, private or other)?

^c Is the support sufficiently available? (Yes = sufficient; No = not sufficient)

^d Is the support convenient to access or easily made available? (Inconv = Inconvenient, Con = convenient; very convenient)

^e Rating the importance or helpfulness of the support. (Very important; Imp = important; No = not important). Not everyone filled out this point on the questionnaire sheets.

Regarding the family planning program, 60% considered it as not important: some because their thinking was still old – they wanted to produce many children "children are better than wealth"; and others because they did not know well the medical information about birth control application. Some women believed that if they waded in the water for a long time, they could not have an intra-uterine device (IUD) or diaphragm inserted as this would cause infections. Under the program, they could also be supplied with medicine to treat infections, but the medicine was not enough to treat them completely. So they were confused about the family planning program especially as it related to gynaecological disease. Again, the doctor spent time discussing this issue and suggested that it was no problem to use an IUD or diaphragm. For those with gynaecological disease, they should first treat the disease and then re-apply the birth control method.

Regarding the poverty alleviation, 85% knew where the support come from and for what purpose.

In terms of aquaculture, all of them thought that it was very important because it increased family income Although all households could access this government support, the funding was very little and households said that they needed more support.

Through the research process, women realized that they had many financial difficulties because they have too many children.

Conclusions

Women's health is affected by fishing activities and this impacts on the livelihood of the household when women cannot work or need money for medications. The women are aware of their health problems and are aware that fishing practices are linked to health issues, however they did not fully understand the link between fishing practices and personal health.

Although women are aware of different services available, this does not mean that they understand what these services mean or how to gain access to them. They feel that most services are out of their reach and, certainly, that they have less access to services than women from fixed gear fishing and farming-fishing households.

Most of women in this group are illiterate and do not have stable settlement. They are the poorest and thus have very low social status. They have less opportunities to participate in community activities and less chance to access and to learn about social aids and services. They are busy wading in the water and looking after their family, so they don't have time to learn more.

Recommendation

The women should consider different protective options or devices. For example, they should wear gloves when splitting clams and, during hot and sunny periods, women should avoid fishing.

Training courses on heath should be provided to raise women's awareness of the impacts on health. Particularly in the case of gynaecological diseases, they need to learn more. They should stay at home during menstruation and limit wading in the water during pregnancy. They should visit the clinic immediately upon noticing any signs of problems.

The local doctor should increase treatment provided to the fishing women to prevent and avoid diseases.

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