Activity Report

Vol 1

Kotaro Shinchi

2016/Nov ~ 2017/Jan

Contents

1. **Arranging the swimming pool**

~Cause ~

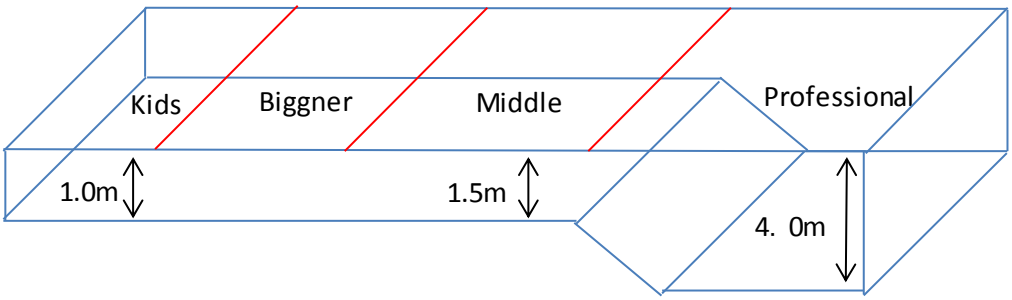
A few years ago an accident happened at 4m depth in this pool.

Lifesaver demand requires for pool management but the shortage of lifesaver is a problem.

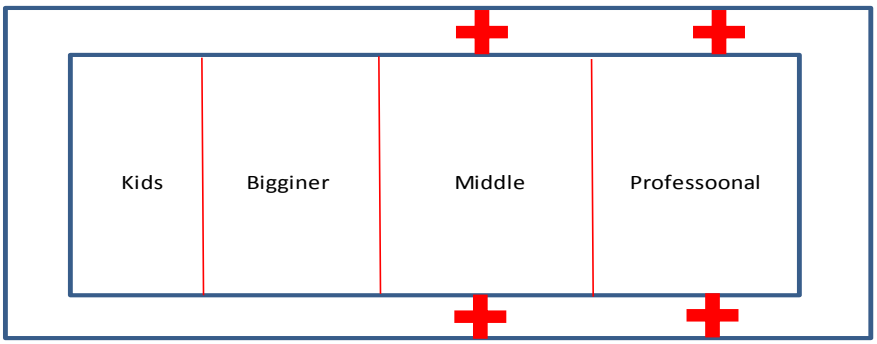
So in the present, it is difficult to manage the swimming pool safely.

~Solution~

(1) Setting up the course rope and dividing pool into four areas.



(2) Setting up four rescue ropes at poolside for the emergency.



~Result~

The customer could understand the depth and choose the swimming course by themselves.

The lifesaver was able to announce for the customer easily and quickly.

The lifesaver was able to rescue quickly and safely, because the lifesaver does not have to get in the water when the emergency happens.

Therefore we could arrange the swimming pool better than previous

2. Rescue skill training

~Object~

To rescue the patient quickly and in a correct way.

At the beginning of the training they did not throw the rope correctly.

(1) Coaching points

① Reeling up the rope carefully and smoothly.

② To keep looking at the patient when the rope is reeled up.

③ To keep talking with patient

(2) Contrive

① Setting up the rescue rope in the same rule.

② To Tie the knot at the end of the rope

~Result~

After training they were able to throw the rope correctly and quickly.

And we are ready to rescue anybody and any time.

3. Lifesaver Examination

~Cause~

There was much demand for lifesaver in this pool therefor we conducted a lifesaver examination to hire two lifesavers.

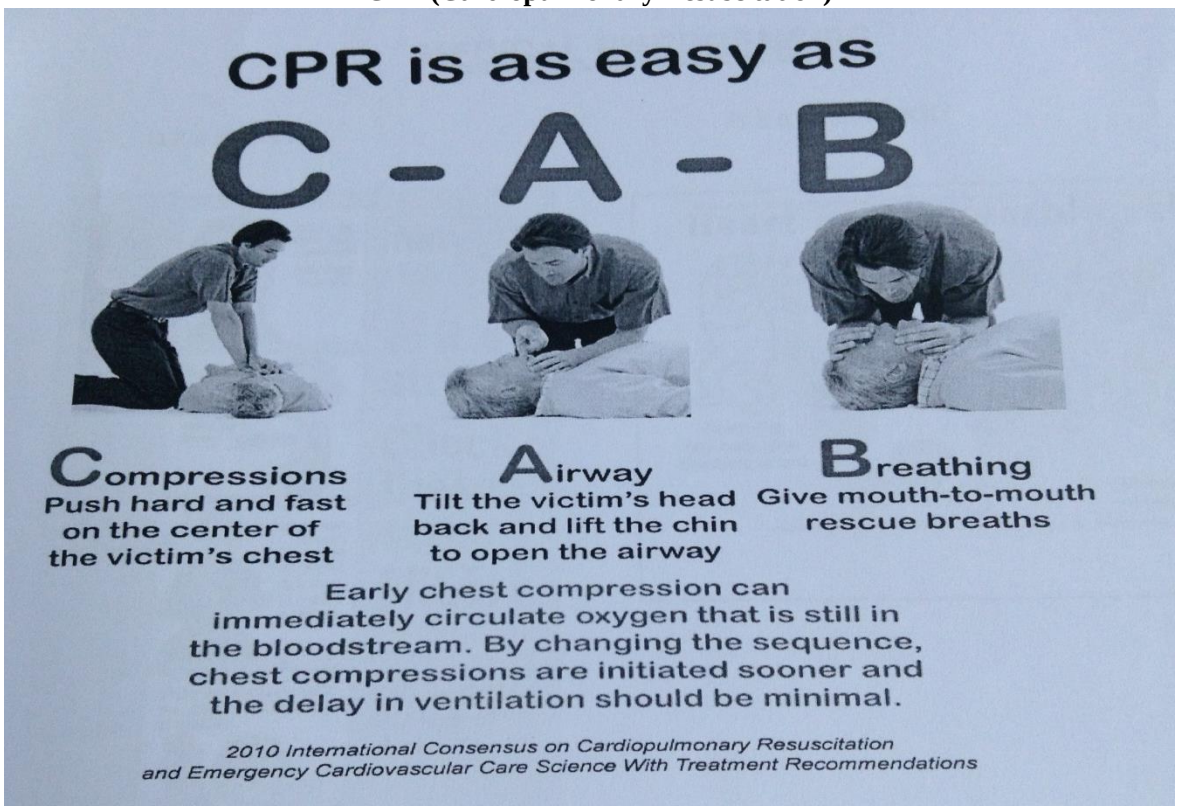
Examination contents

1. Swimming level
2. Diving skill
3. Rope rescue experience
4. Relative knowledge

~Result~

According to the examination results, we recognize their skill and knowledge are qualified as a lifesaver. And we could confirm the rescue principle that People must dive into the water with floating materials when you find the patient. If not, the lifesaver also will be drown by the patient in panic. And also we confirm the first aid skill after rescuer the patient.

CPR (Cardiopulmonary Resuscitation)



4. Management of the water quality

~Cause~

We must manage the water quality for the customer. But our swimming pool does not install the circulate system to filter the water. So it is difficult to control the water quality.

（1） Review of the chemical instructions.

So far we have used two chemicals there were cooper sulfate pentahydrate and chlorine when the water quality becomes worse such as green color and white color.

What is the problem?

The cooper sulfate pentahydrate must be used inside the filter system.

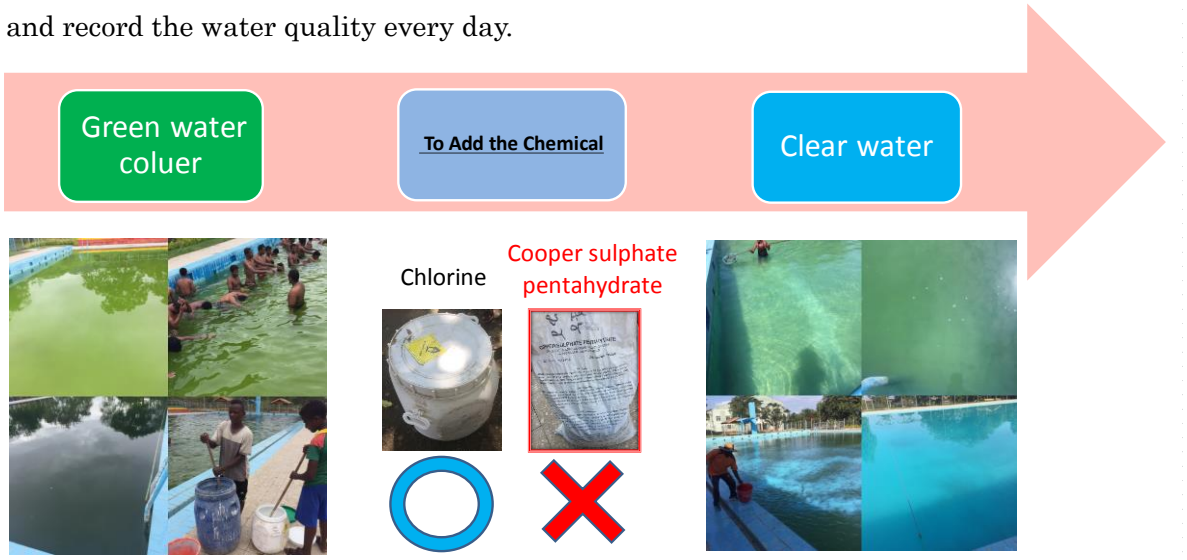
We didn't know how much amount of chemical should we add at once into the swimming pool.

~Solution~

① Control the water quality by using only chlorine

② Calculate the chemical amount by pool capacity and chemical coefficient etc.

③ Observe and record the water quality every day.



~Result~

We were gradually able to control the water quality with only chlorine.

We could understand the reason why the water quality was low by the daily record.

~Problem~

We cannot adjustment the chlorine level correctly, because we don't have an indicator, which checks the water quality. So we must prepare the indicator as soon as possible. If we get the indicator, we can check the pH level and chlorine level. Then we can decline amount of the chemical consumption.

※At the first sight, the water seems clear but there are many kind of microbe inside the water.

Therefor we need to sterilize the pool water to by the chlorine.

※International standard level of swimming pool water

Adjustment for chlorine level 0.4ppm~1.0ppm and pH level 7~8 every day.

DATE	No. of Custmer			Condition of Water		Condition of Weather		Overflow the water (Yes/No)	Chlorine level (ppm.m	Water Quolity (pH)	Additional Chemical	
	AM	PM	Total	Color	temperature(°C)	Weather	temperature(°C)				Name	amount (kg)
2016/11/27	0	0	0	clear	?	rain-sun	?	No	?	?		
2016/11/28	40	0	40	Deep Green	?	sunny	?	No	?	?	chlorin	
	/	/	/	/	/	/	/	/	/	/	coopersulphyet	12
2016/11/29	0	0	0	Deep Green	?	sunny	?	No	?	?		
2016/11/30	0	0	0	Green	?	sunny	?	No	?	?		
2016/12/1	0	0	0	Green	?	sunny	?	No	?	?		
2016/12/2	0	0	0	Green	?	sunny	?	No	?	?		
2016/12/3	0	0	0	Green	?	sunny	?	No	?	?		
2016/12/4	0	0	0	Green	?	sunny	?	No	?	?		
2016/12/5	0	0	0	Green	?	sunny	?	No	?	?		
2016/12/6	0	0	0	Light Green	?	sunny	?	No	?	?	chlorin	
2016/12/7	40	0	40	Light Green	?	sunny	?	No	?	?		
2016/12/8	0	0	0	Light Green	?	sunny	?	No	?	?		
2016/12/9	40	30	70	Light Green	?	sunny	?	No	?	?	chlorin	
2016/12/10	0	0	0	Light Green	?	sunny	?	No	?	?		
2016/12/11	0	50	50	Light Green	?	sunny	?	No	?	?		
2016/12/12	0	50	50	Light Green	?	sunny	?	No	?	?		
2016/12/13	0	0	0	Light Green	?	sunny	?	No	?	?		
2016/12/14	0	0	0	Light Green	?	sunny	?	No	?	?		
2016/12/15	0	0	0	Green	?	sunny	?	No	?	?	coopersulphyet	12
2016/12/16	0	0	0	Blue	?	sunny	?	No	?	?		
2016/12/17	0	0	0	clear	?	sunny	?	No	?	?		
2016/12/18	0	80	80	clear	?	sunny	?	No	?	?		
2016/12/19	0	50	50	clear	?	sunny	?	No	?	?	chlorin	5
2016/12/20	0	50	50	clear	?	sunny	?	No	?	?		
2016/12/21	0	50	50	clear	?	sunny	?	No	?	?	chlorin	5
2016/12/22	1	50	51	clear	?	sunny	?	No	?	?		
2016/12/23	45	45	90	clear	?	sunny	?	No	?	?	chlorin	5
2016/12/24	0	43	43	Milky clear	?	sunny	?	No	?	?		
2016/12/25	13	32	45	Milky clear	?	sunny	?	No	?	?		
2016/12/26	17	73	90	Milky clear	?	sunny	?	No	?	?	chlorin	5
2016/12/27	6	110	116	Milky clear	?	sunny	?	No	?	?		
2016/12/28	0	43	43	Milky	?	sunny	?	No	?	?	chlorin	25
2016/12/29	0	0	0	Milky	?	sunny	?	No	?	?	chlorin	5
2016/12/30	0	83	83	Milky clear	?	sunny	?	No	?	?	out of stock the chemical	
2016/12/31	13	55	68	Milky clear	?	sunny	?	No	?	?		
Total	215	894	1109									

Water Color

Clear Blue	Clear	Milky	Light Green	Green	Black

Weather condition＝sunny ☀ cloudy ☘ rainny ☂

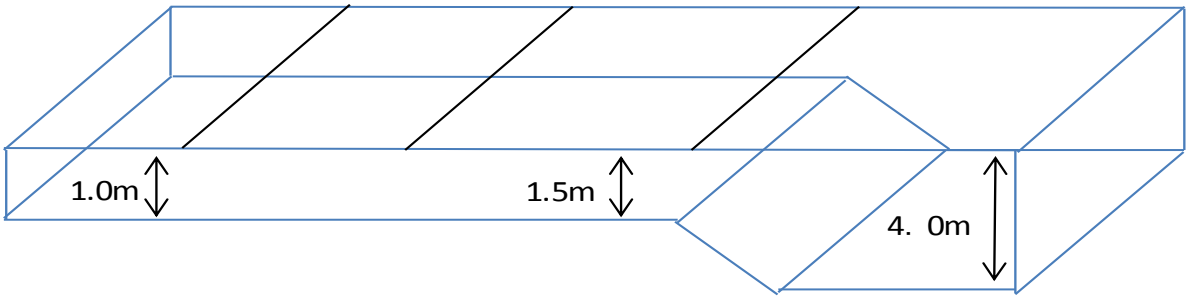
Chemical amount

	Mon	Tues	Wed	Thurs	Fri	Sat	Sun
Chemical amount(kg)	6kg		6kg		6kg		

Water Quolity(pH)

Acidity			Low Acidity			Neutrality		Low Alkalinity			Alkalinity		
1	2	3	4	5	6	7	8	9	10	11	12	13	14

hight disinfectant — suitable for pool pH — low disinfectant



Chemical amount formula

Chemical amount (g) = ①chlorin level (ppm) ×②pool capacity(㎥) ×③chlorin coefficient ×④pool coefficient

Chemical dosage (g) = ①1.0ppm × ②2730m³ × ③1.43 × ④1.5 =5.855(g)

①criterion of chlorin level		②Pool capacity(m³)		③chlorin coefficient		④coefficient	
Drinking water	0.1～0.4ppm	width	21m	Calcium Hypochlorite70%	1.43	Drinking water	1.1
Pool water	0.4～1.0ppm	length	50m	Calcium Hypochlorite65%	1.54	Pool water	1.5
Algae for killing	2.0ppm	depth(until35m)	2m			Algae for killing	1.8
		depth(until15m)	4m				
		Pool capacity	2730m³				

Disinfectant level of chlorin

Chlorin level		Microbe
0.10	ppm(mg/l)	typhoid bacillus,dysentery、cholera,staphylococus
0.15	ppm(mg/l)	corynebacterium diphtheriae
0.20	ppm(mg/l)	pneumonia germ,
0.25	ppm(mg/l)	colon bacillus
0.41	ppm(mg/l)	adenovirus

Trouble Shooting

Situation	Caused by	Solution	Prevention
Green Pool water (build up of Algae)	①Low chlorin level ②High water temperatuer ③Strong sunshine ④Rain(algae spore increase in the water)	①Adjustment for chlorin level at 5.0ppm or over ②Keep out into the pool for 24hours ③Overflow the pool water	①Chlorin lervel at 0.4～1.0 ppm *If the chlorin level 0.2ppm or less, the algae grow. ②Overflow the pool water
	Caused by	Solution	Prevention
Milkey Pool water	①High ammonia level in the water The over capacity of customer increases the ammonia level because of human urine and sweat.	①Adjustment for chlorin level at 5.0ppm or over ②Keep out into the pool for 24hours ③Overflow the pool water	①Chlorin lervel at 0.4～1.0 ppm ②Overflow the pool water

5. **Supporting swimming lesson for sport science students.**

(Nov28th~ Dec12th)

~Lesson contents~

(1) How to put face in the water

(2) How to breaths inside the water

(3) How to floating the body

(4) How to flatter kick

~Remark about lesson~

(Positive aspect)

The lesson contents for the beginner, because the most of students do not have swimming experience before lesson.

~Problem~

There are only 3 or 4 lesson by the imperfect pool management such as lack of the shower.

The teacher is not enough to teach all students and there are a few teachers who can teach how to swim.

There are a few opportunities for student who wants to be teacher.

~Next season mission~

To coordinate training course of swimming coach

~Solution~

(1) To discuss the lesson contents with sport department teacher and to conduct workshop with teacher before starting school term.

(2) To give extra training for students who become a teacher.

6. Making the float material for swimmer

~Cause~

All most customer does not have swimming experience and they need to support by floating material.

This floating material is used by not only a beginner but also an experience swimmer.

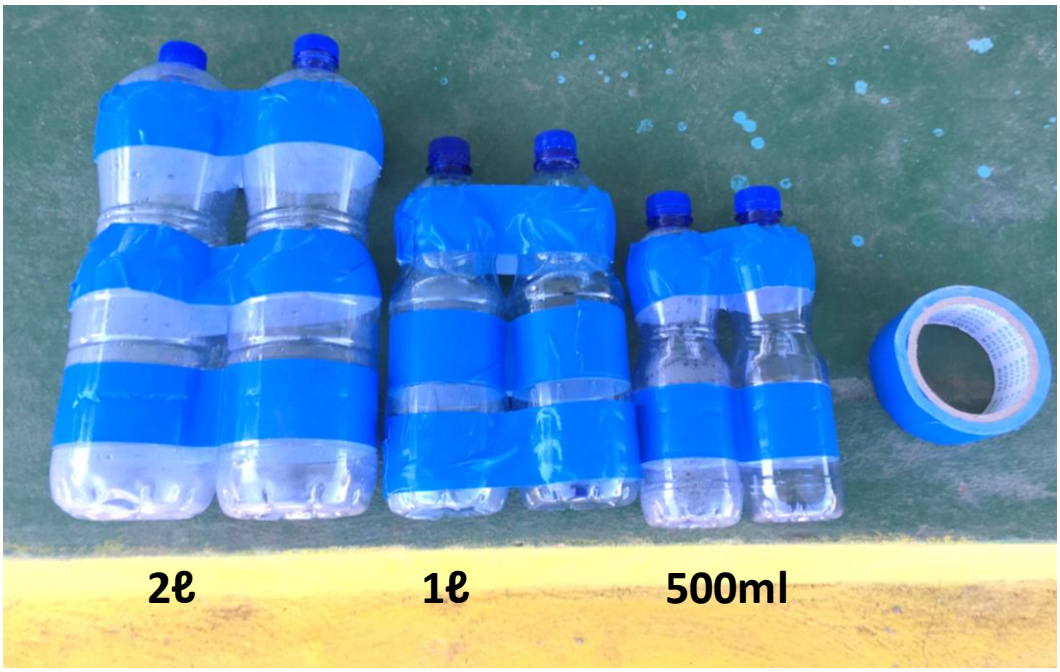
~Handmade the floating material~

(1) Using SOKE trees.

⇒It is difficult to prepare the SOKE trees.

(2) Using parasitic bottles

I try to make three types of floating material. (500ml / 1ℓ /2ℓ)



~Result~

The customer was able to float their body so they enjoyed swimming

If someone ask me the how to swim I could give many kind of swimming drill for them

~Problem~

Most of parasitic bottles were broken within 2 months

~Next approach~

I try to make floating material strongly.

We announce how to use floating material.

7. Swimming lesson for the staff

Warm up

Stretch the body

We swim for 400m to 600m every morning.

~Training Menu~

Warm up 50m×2

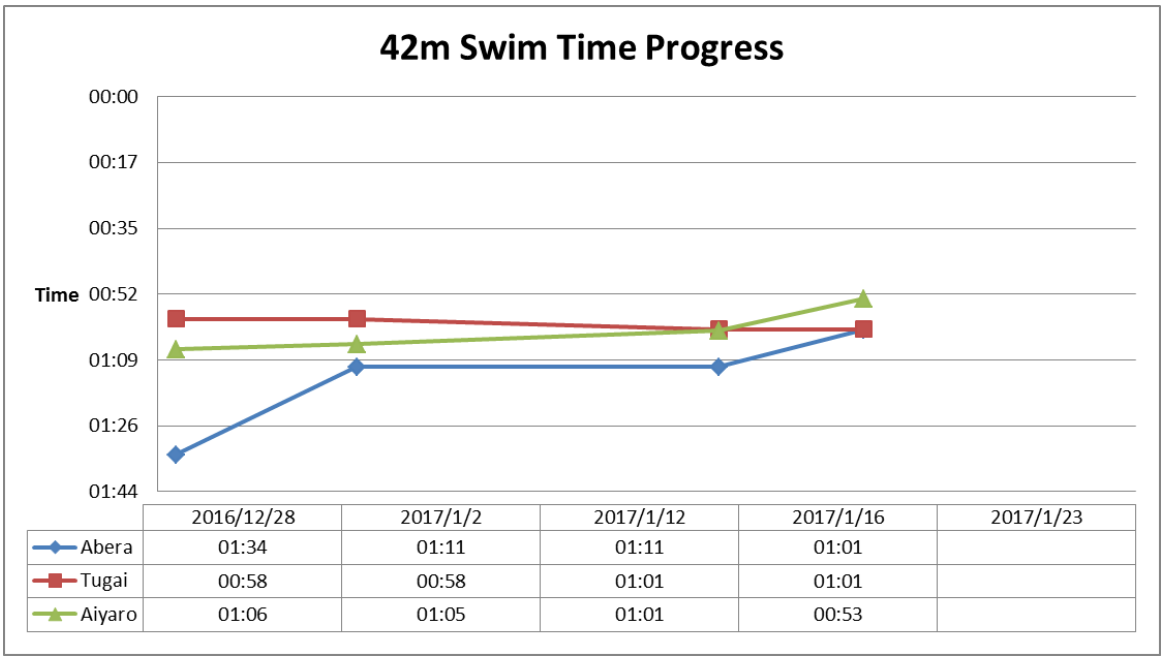
Kick drill 50m×2

Pull drill 50m×4

Swim 50m×2

Cool down 50m×2　Total 600m

Look at the picture, their ability is improving.



	2016/12/28	2017/1/2	2017/1/12	2017/1/16	2017/1/23
Abera	01:34	01:11	01:11	01:01	
Tugai	00:58	00:58	01:01	01:01	
Aiyaro	01:06	01:05	01:01	00:53	