

## SPUMS ANNUAL SCIENTIFIC MEETING 1991

### A TRAINING AGENCY PERSPECTIVE ON DES FUNDING AND OTHER TOPICAL ISSUES

Terry Cummins

#### Introduction

The diving community needs to have a stable and workable relationship between instructor agencies and hyperbaric medical personnel.

In the past there have been frictions between the instructor agencies and the diving medical fraternity. Some of those frictions still exist today. It is important that we identify these potential problem areas because it is not desirable for us to slip back into what Dr Des Gorman once described as "instructor bashing" by doctors, or conversely, instructors feeling that diving doctors are individuals who need to be viewed with scepticism.

#### Areas of Concern

There are five major areas of concern that need to be addressed. With a clear understanding of these problems, or should I say of the misunderstandings they create, we will reduce possible friction between instructors and diving doctors generally and create the necessary working relationship we all desire.

Please remember my topic includes the phrase "a training agency perception". It is important to realize how instructors feel about major issues, even if their perception is not always based on fact.

I feel that it is equally important for doctors involved in hyperbaric medicine to understand that some friction does exist between the two groups, that it is unhealthy and that it needs to be cured. To do this successfully one must first understand how instructors and some instructor agencies feel about some topical issues.

In presenting this topic it is acknowledged that some of the content will not be popular with some medicos, and I expect a colourful discussion at the conclusion of the paper. One could say I am prepared to stick my neck out to bring some of these issues into the light so that a more favourable era may emerge.

#### Future funding of Diving Emergency Service (DES)

With the collapse of the National Safety Council of

Australia (Victorian Division) there was an immediate need for funding. The instructor agencies, the Commonwealth and South Australian Governments and elements within the medical community provided funding for DES.

The major Australian instructor agencies, the Federation of Australian Underwater Instructors (FAUI), the National Association of Underwater Instructors (NAUI) and PADI Australia responded by making equal monthly grants to DES. Grants were also forthcoming from the Dive Industry and Travel Association of Australia (DITAA) and PADI U.S.A. Later this was altered to a system by which each agency supported DES by that method which they saw as most appropriate. For example, earlier this year PADI Australia made a \$3,000 grant to DES while reserving the allocation of further funding until later in the year. FAUI currently has a policy of paying a percentage of every diver certification fee to DES. Neither NAUI or SSI have made recent contributions based on reasons they feel are valid.

The diving medical fraternity needs to realize that both instructor agencies and the members they represent expect that the funding of DES is not left entirely to the instructor agencies and the Commonwealth Government. It is acknowledged that individual medical identities have personally committed a lot of time and effort to DES, however the instructor agencies think it is appropriate that the diving medical community in general make a larger contribution.

This should not be perceived by the diving medical community to be an attack on them from the instructors in the field. Indeed as a group it would be fair to say that the instructor agencies feel the contribution made by the Commonwealth Government to providing special facilities should be much greater. This is a particularly good argument when an observation is made of other forms of recreation and the relative stress they place on medical facilities, retrieval services, Medicare and private health funds.

Economic forces affecting dive retailers means that an endless stream of money has not flowed, and will not flow, from the "industrial side" of the diving community to DES. As a result of these economic forces and other factors, additional sources of income will need to be obtained to sustain the facility.

To develop new sources of income, DES and its associates must realize the sensitivity of marketing products that have traditionally been the realm of the training agencies. It is the feeling of the training agencies that products, including the marketing of the Defence and Civil Institute of Environmental Medicine (DCIEM) dive tables, are not a good choice.

Movement into this area of fund raising will result in the training agencies viewing DES as a competitor because all agencies have their own dive table in one form or another. Clearly agencies do not donate money to competitors. Income from training agencies could immediately cease if this problem was allowed to develop and the net result would be a loss of agency support for DES. Already this is the stand of SSI and funds will not flow from this organization unless the DCIEM debate is resolved. Some feel that this debate is resolved. However while a close relationship between the Australian Patient Safety Foundation (APSF), Divesafe and DES exists it would appear problems will continue to occur.

The sale of a dive table as a source of raising revenue for DES has another downside because, apart from the competitive aspect, it could follow that DES would be supporting, say the DCIEM tables over the PADI Recreational Dive Planner, the FAUI Newway Table or the U.S. Navy derivatives used by both NAUI and SSI. This may lead to an argument over which table is the best.

In summary, it is not acceptable to the training agencies that the DCIEM tables be promoted by DES or any of its associated organizations such as the Australian Patient Safety Foundation and Divesafe, since this will unnecessarily lead to suspicion regarding competition between tables. It is very clear that the right table to use is purely a matter of opinion and is based on the factors the user feels are important and the use for which it is intended. Therefore, in relation to tables and their promotion, DES must be apolitical or they will be perceived as a competitor in this area by the agencies. I am sure the training agencies would not like to see this problem develop further. Well, where will the money come from?

Other products or services must be found to raise funds. Certainly DES "membership" could be one source of income. This method of raising income or funds has already been utilized by the Divers Accident Network (DAN) in the U.S.A.

The instructor agencies may be prepared to help in this area. For example, PADI has an international agreement with DAN to publish a DAN membership information sheet in all its publications. This ensures a large world-wide promotion of DAN membership. One should note that PADI Australia has followed this policy in all locally produced publications including the production of the Openwater Manual which also references DES. Linked to the DAN/DES membership idea is the consideration of offering a diver insurance policy.

Also in relation to DES, it is important to realize that the training agencies want their relationship with DES to be a two way experience. In return for any funding support the training agencies give DES, they would like to see something in return.

NAUI has formally asked DES to give them some indication of the benefits NAUI will derive from funding the facility. NAUI's perception is that a satisfactory explanation has not been forthcoming so no funding has been provided in recent times from this agency.

The problem is that instructors do not feel they put the patient in the chamber in the first place, so why should they meet the cost, either directly or indirectly. Instructors do however, acknowledge the important service DES provides, so they are prepared, at best, to provide some of the support and funding.

It would be fair to expect a number of benefits would flow to the instructors and instructor agencies from their involvement. This may include but, is not necessarily limited to:-

Access to reliable DES data. It would appear that Dr Chris Acott is currently working towards this goal.

DES to be apolitical in all aspects of its operation and operate as a source of professional consultation for the industry participants.

### **Opinion statements that are perceived to be SPUMS Policy**

Somewhat related to the DCIEM dive table issue, the instructor agencies have a problem in that the opinions of high profile diving medical personalities are generally perceived as policy statements of SPUMS. The same applies to remarks by staff at hyperbaric facilities being regarded as official statements on behalf of DES. On more than one occasion high profile members of SPUMS have made what some describe as sweeping statements in relation to the best dive table or the best instructor system. In some cases these comments have fallen just short of legal action.

It is no secret that some individuals have very fixed ideas on diver training, the right dive table to use or the make-up of a diver medical. Although I am not suggesting that individuals are not entitled to their opinion and that opinion cannot be expressed, what I am suggesting is that there is a right way to go about that procedure. One way is to ensure that if one has an opinion that one is careful not to suggest that it is the opinion of SPUMS, unless it really is the collective opinion of SPUMS. SPUMS can assist in this process by having formal policy statements on vital issues. This would clearly illustrate the difference in opinion of a member as opposed to the Society.

The best way to voice opinion at this level is to offer a paper at next year's SPUMS Conference and so give the industry a chance to discuss topical issues without involving the public, which only leads to our industry being viewed as factionalized.

It is important to realize that a major objective of my presentation is to gain a level of co-operation between the medical fraternity and scuba instructors. Because of the efforts of some, this is not happening.

Another way to reduce friction when varying opinions exist, on what is proving to be an impure science, is not to publish articles like the one from which the following quotation is taken, written by a "high profile expert".

"In previous articles I have been ever critical of many recreational diving operations in this country and overseas. With the odd exception (such as those at Heron Island and a very few other centres) I felt that my criticisms were, and in many cases and still are, fully justified. Proof of these beliefs was evidenced by the steady flow of injured divers to my surgery in Brisbane, as well as to other diving medical colleagues in Sydney and elsewhere. These all confirm similar injuries to those I see. This history of the diving activities preceding most of these injuries, and the subsequent care shown by many of the Diving Operators leaves one in no doubt as to the gross deficiencies of the diving industry in Australia today."<sup>1</sup>

Notice how this article directly implies "the operator" is to blame for a diving injury. By reference to accident statistics it is clearly shown that very few if any accidents occur in training or under direct supervision of a diving professional.<sup>2</sup> You can well ask why bash the operator if one of his clients has a problem.

The damage articles like this do is sometimes irreparable or at best it takes years to remove the bad feelings caused between medical circles and instructor groups.

Unfortunately, dive stores see articles like this as a return to "instructor or dive store bashing" by the medical fraternity generally. They will also see it as a negative promotion of their services to their customers and that really hurts ! Really what data exists to support this individual's single impression? Unfortunately, this type of article gives the general diving public the impression something is really wrong in the diving industry. Is this really the case ?

### **Accident referrals**

The increased availability of recompression and hyperbaric treatment facilities in the last few years has led to a unique problem.

From an instructor's point of view, the availability of treatment facilities and the subsequent treatment of individuals, particularly those with symptoms of DCS, may be working against instructors politically. Several reports from the field indicate that individuals treated in chambers who were subsequently diagnosed as not having DCS are used in data to imply diving is becoming more dangerous than it was

in the past. An example of a poor interpretation of reality is that if DES calls have increased so diving is becoming more dangerous. Many would argue that the number of calls may continue to increase regardless of the safety standards as more divers are encouraged to use the full range of services offered by DES.

Inaccurate data also exists as we see when a number of treatments or admissions are quoted without reference to whether they were finally proven to be necessary or useful to the patient. Indications are that at least at the Royal Adelaide Hospital attempts are made to ensure the data is kept clean.

The instructor agencies would welcome the idea of removing those individuals that are later diagnosed as not having diving related symptoms from treatment statistics. Similarly we would like to see data not include hyperbaric treatment of patients for non-diving related complaints, such as gas gangrene.

Currently all instructor agencies have their members advise students and divers to seek out DES and report for treatment if any symptoms develop after diving. This is based on the idea that if in doubt, and the facility is there, use it.

We would not like to have a shift away from this current policy, but it appears that if instructors or dive schools are at all suspicious of the political outcome of seeking treatment or if they feel that they are going to look unnecessarily foolish, they may move towards the unfavorable policy of suggesting presenting for treatment only when you are sure you have symptoms. It is also important to note that the "instructor bashing" phenomena addressed earlier is exasperated by this situation.

It is unfortunately a feeling amongst some instructors that elements within the diving medical community have attempted to make political mileage or have increased budgets out of genuine attempts by divers to seek professional medical consultation and possibly treatment.

There is another aspect to the instructor bashing or "blame model" as I call it, which is worth discussion. As mentioned earlier, rationale of the blame model is based on the very poor assumption that whenever there is a diving accident, that it is the "fault" of someone.

Traditionally, diving medical sources have immediately looked towards the quality of the instruction, the quality of the divemaster services or the quality of the dive store. Although under some and only some circumstances, this may be a valid approach, the more common cause of diving accidents is "diver error". Diver error can originate from many sources and in fact is as varied as the individuals who are involved.

Unfortunately, the total focus of the blame model is on the dive operator and this is invalid, because clearly the majority of dive operators in this country are extremely professional and know only too well that they live in a world where it seems to be the norm to seek blame someone. The catch word to illustrate this is "duty of care". In Cairns, Queensland, over 3,300 dives are carried out each week. This reflects an outstanding amount in diving activity. Some elements would like us to think that this area is also the scene of massive standards violations and unprofessional behaviour. Using the objective mind this is simply not the case when one compares diving activity to the number of accidents and then exclude those due to contributing factors outside the operator's control.

In no other recreational activity is this phenomenon so pronounced. It is indeed unfortunate that a few diving medical personalities, competing dive stores or instructors need to create such a negative view of our industry. Those of us that have been involved in observing trends over the past few years are often left wondering why the blame model does not exist in football, sky diving, snow skiing or other recreational areas. Is it just the type of people our industry attracts?

We are further confused when snow skiing and football have a much larger number of serious accidents than does scuba diving, but attract no apparent attention from either the media or medical or participant circles.

It seems to scuba instructors that if one breaks an arm or leg playing football, one is a real man or a hero of the team, but if one has a diving accident one is stupid and irresponsible. Have we all in our own way contributed to this phenomenon? What is really the difference between diving and other recreational activities?

Also be aware that, while we all run around trying to blame someone for what may have simply been an accident, we may run the very real risk of missing the entire point of accident analysis. That is, we may miss placing emphasis on correction and prevention while we are preoccupied with placing blame. This question really needs to be answered seriously before our industry can really grow and allow us all to realise our own goals.

### **Medical input at Standards Australia**

Standards Australia has representatives from both SPUMS and the instructor agencies. Currently the diver medical is being debated and several major disagreements have emerged. Since the exact content of that debate may be addressed in other papers at this conference, I do not want to address individual items. I do, however, want to address some important issues generally. Who should be authorised to conduct diving medicals is a hot issue with instructors.

Clearly the trained number of medical staff to do diving medicals is currently out of balance with diving applicants and the market place.

It would be extremely difficult to assume that the demand for diving medicals could be met by those with specialized training in hyperbaric medicine at this time.

In 1990, nearly 100,000 individuals passed through dive schools in Australia in total. This means that scuba instruction is a \$30 million per annum industry in Australia alone. Most (70%) were at the entry level, requiring diving medicals. This is approximately a \$5 million per annum industry.

The instructors in the field will not support the concept of medicals being conducted by those only with experience in hyperbaric medicine until medical personnel of that calibre are freely available. Similarly, given these numbers, it is doubtful whether we will reach a position where this will be a practical option for several years, especially in remote areas and on resort locations where a relatively large amount of instruction is currently taking place. Doctors will have to also ask the very real question of whether the medical part of the industry is growing at the appropriate rate to ensure this debate will not continue. Under the present model the ball is very much in the court of the diving medical fraternity to ensure that a suitable number of doctors are trained in the next two years.

The instructor agencies are therefore reluctant to support the SPUMS stand on this issue and this should not be interpreted by physicians to be a movement away from safety. In fact, the data shows that medicals conducted by GP's may be sufficient, especially if a form is established with suitable guidelines. Again we are left asking what makes diving so special. If a GP has a problem in providing a diving medical, he or she will refer it to a specialist. Why in diving are we assuming the professionalism of the GP is such that he will not follow the same practice as we expect him or her to follow if the GP was viewing another specialized area?

In summary, some instructors feel that some individuals within the diving medical fraternity have developed specialised practices which they seek to protect and that they have used their public profile to have more emphasis on this issue than it possibly deserves. Instructors would agree it is desirable to have doctors with specialised training, but at this stage it is impractical, based on current demand and the availability of specialists.

### **Non-disclosure**

It is clear that several of the diving deaths from 1980-86 occurred due to medical conditions. It is the feeling of

many instructors that regardless of the medical, regardless of the quality of the physician applying it, this will continue due to "non-disclosure". Clearly our biggest problem is not who administers the medical but that the information that is gathered is accurate. Some doctors seem to have the opinion that instructors should go to unbelievable lengths to ensure the medical is carried out correctly. Similarly, instructors feel that it is not exactly fair when some elements in the diving medical fraternity suggest instructors should override the expertise of a GP in relation to assessing the fitness of the individual to dive.

One needs to ask the question, how many of these accidents would have been avoided if a specialist had conducted the diving medical? Indications are that the most experienced physician has little chance of detecting predisposing conditions if the patient is not prepared to be honest and assist in the examination.

This type of comment has been printed in some dive magazines recently.

"If such an instructor then permits the diving candidate to be examined by a doctor (known to possibly have little experience or expertise in diving medicine) and then that instructor accepts the diving candidate as passing the fitness examination (without questioning the validity of such exam), then the instructor could well be equally culpable by law for any litigation under this "duty of care" legislation".<sup>1</sup>

Is this a true legal interpretation of the reality of the situation or is purely one opinion. It is not the opinion of our legal counsel and I respectfully suggest that it would not be the opinion of yours.

How should the average scuba instructor would interpret this article? More importantly how do doctors feel the average GP would interpret this article ?

At best, this type of article causes mass confusion amongst the instructor community.

### Money issues

Who gets paid to conduct a medical ? Who gets paid to train a doctor to conduct a medical ? Who gets paid to teach scuba ? Who gets paid to teach scuba instructors ?

I ask who really cares ? We all get paid one way or another. Some instructors are concerned that it is being said in some circles that instructors wish to make money at the expense of safety. Money and the cost of medicals is a non-issue. A \$60 medical in most cases will make little difference to marketing a \$400 scuba course. The real debate is whether the medical is at all necessary in the first place, whether screening is a suitable alternative and whether leaving out

the GP is overkill.

Instructors know that if instruction is unsafe, instructors are out of business. We certainly acknowledge our duty of care. We also acknowledge that the only way to prevent accidents in any sport is to stop people from participating. Unfortunately, to instructors, that seems to be the option some within the diving medical community are pushing.

### Conditional medicals

Despite calls from all the instructor agencies, some doctors still insist on granting "conditional" medicals. It is a major frustration to the training agencies that some diving medical doctors insist on issuing conditional medicals or alternatively re-writing the course syllabus to suit a patient. I say patient deliberately because if they are not fit to dive they are likely to be a patient at sometime or other. It is important that to all those performing diving medicals, realize that courses cannot be customized to suit medical conditions. This includes courses for the disabled. Special training techniques can be employed for this group, certainly we can take more time in the training process, but they too must conform to the course objectives facing all students. If we cannot guarantee that the medical condition of the applicant is such that they can meet the performance objectives of the programme then they cannot be accepted.

Clearly if a medical conditions exists, it is the responsibility of the doctor to advise the applicant accordingly.

Some frustration also originates in the failure of some doctors to break the news to his patient that he or she cannot dive. Unfortunately this reluctance comes at the same time that it appears doctors are vocal in calling for tighter control. It seems that these doctors would prefer to leave it to the instructor to refuse access to a dive course than accept the responsibility themselves. This problem is also reflected in the previous magazine quotation.

Strangely it seems that the physicians offering conditional medicals are the most outspoken on diving medical issues. Common "conditional medical" phrases we still get include:

- "10 metres maximum depth"
- "18 metres maximum depth"
- "Only dive to half the No-decompression diving limit"
- "Only under the control of an instructor"
- "Only if under the control of an experienced diver"
- "No free ascent practice"

All are unacceptable because they cannot lead to certification of the diver.

"No free ascent practice" is an interesting one because I am aware that no agency includes this in their training. Maybe reference to instructor manuals and a clear

understanding of out of air emergency drills offered by the various instructor agencies would clear this one up once and for all.

The instructor agencies would appreciate it if their members did not become the focus of potential debates with prospective students on fitness to dive. That surely is the domain of the patient and the physician.

At the beginning of this presentation I stated that some of the content may not be popular with all those attending. It was my intention however to create healthy debate within the arena of a professional conference, rather than allow totally unnecessary misunderstandings to exist. If we do not know clearly what the problems are and address them accordingly, we will all suffer from poor information.

The instructor agencies generally are very conscious of their obligations to safety. What we now want is to commence a new era where diving doctors, instructor groups and other elements within our industry can work together for a common goal.

Only by the inclusion of other dive industry participants in the SPUMS Conference can we ensure that is discussed becomes useful. For example, Dr Chris Acott can deliver as many papers as he likes for the next 10 years on incident reporting but if those reports are not used by instructors, dive stores and equipment manufacturers to make constructive changes his efforts are unfortunately nothing more than an academic exercise in futility.

I see the five major areas of potential conflict I have outlined as a starting point for this new age of co-operation. The benefits to us all of creating sound working relationships are immeasurable. Let us start building on it today.

## References

- 1 Thomas RL. Queensland's new 19989 diving regulations. *Underwater Geographic* 1990; Number 31
- 2 *Diving Accident Management In Australia*. PADI, 1988

*Terry Cummins is the Chief Executive of PADI Australia Pty. Ltd. His address is PADI Australia Pty. Ltd., Unit 1/1-7 Lyon Park Road, North Ryde, New South Wales, 2113, Australia.*

*The Committee of SPUMS considered that Mr Cummins was misinformed on a number of topics and authorised Dr David Davies, the Education Officer, to write the reply which follows.*

## A DIVING MEDICAL VIEW OF A TRAINING AGENCY PERSPECTIVE

David Davies

The paper,<sup>1</sup> presented by Mr Cummins at the SPUMS Annual Scientific Meeting in the Maldives, was most interesting as it brought into the open the innuendo and misinformation circulating in the diving community that has been the bane of diving medicine for some years. I have been asked to try to explain why and where Mr Cummins' perceptions vary from reality.

It has been stated before but obviously needs to be repeated that **only the President and the Honorary Secretary of SPUMS may speak on behalf of the Society**. In some circumstances, the Executive committee may nominate a specific person to be the spokesman on a particular subject at a specific time.

The article quoted from *Underwater Geographic*<sup>2</sup> is the personal view of a prominent Queensland doctor and should in not, in any way, be construed as being either SPUMS policy or even the beliefs of many members of SPUMS. In fact, a number of SPUMS members took exception to the sentiments expressed in that article.

The problem of conditional medical certificates has been with us for a long time. It is a consequence of the diving medical being done by a doctor not properly trained in diving medicine. Many of the conditions imposed reflect a lack of understanding of the physics and physical requirements of diving. This problem could be overcome by insisting that all diving medicals are done by doctors with the appropriate training. It is unfortunate that the CS/83 Committee of Standards Australia saw fit to remove this requirement<sup>3</sup> from the proposed standard for recreational divers. There is a reactionary element in the medical community with the misguided belief that once a doctor graduates he is trained for everything. The attempt of the Australian Medical Association to be everything to everyone led to the AMA representative on the CS/83 Committee being instructed to vote against compulsory further training of doctors doing diving medicals.

I believe that the training organizations, and the diving instructors themselves, can help with this problem by suggesting to their students that they attend, for their diving medical, only those doctors with the appropriate training. It does not take long for an instructor to ascertain which of the doctors in his area supply the best service to his students. By so doing, the instructors can exert pressure and stimulate their local doctors to seek the necessary training. SPUMS has no way to apply such pressure.

Mr Cummins appeared to believe that a basic training course in diving medicine turns a doctor into a specialist in the field. Nothing could be further from the truth. The basic