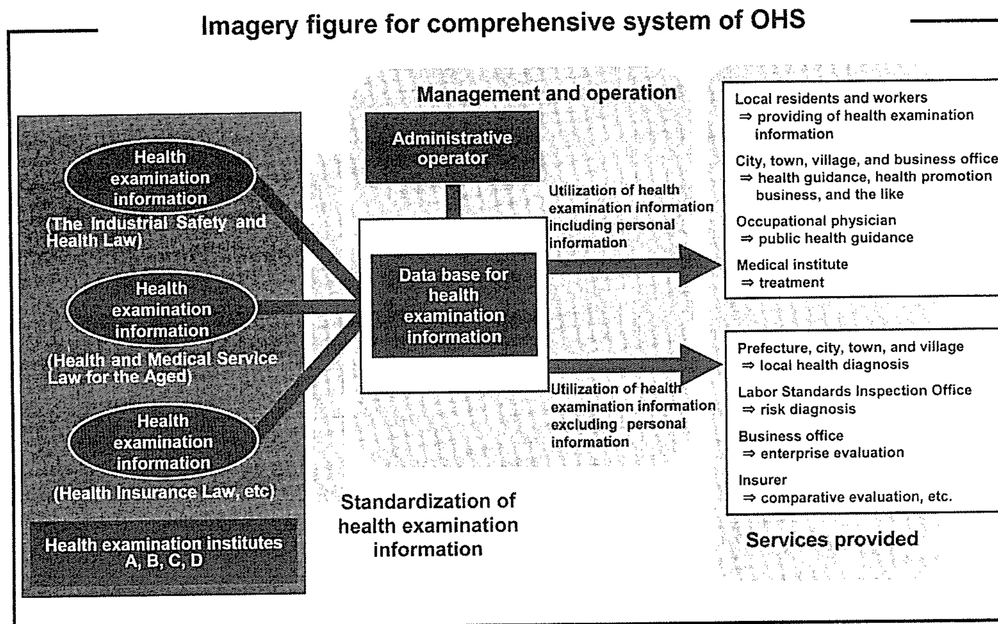

Fig. 2. Composition of health management by institutional collaboration job category.

occupational health service divisions within the company or workplace accounted for only 10% of the total number of employees and the number is declining. Due to the shift towards independent administrative corporations and the resultant increase in the number of workplaces and employees to which the Industrial Safety and Health Law applies, the extent of this trend is not so obvious on the surface but the decline in coverage is expected to continue as companies downsize or spin off.

Promotion of Service providing agencies

While bearing in mind that there are discrepancies in some definitions, measurements, names and situations, the percentage of workers eligible to receive occupational health services in advanced countries is estimated as follows: nations that have the highest percentage are Finland at 94%, Sweden at 80%, and France at almost 90% (officially 100%), followed by Holland at 43% and England at 31% in the middle range and by the United States at 17% and Denmark at 13% with the lowest, although some allowance must be made for differences in the system. Japan belongs to the middle range with an estimated coverage of about 40%. This percentage is certainly not high. One cause of this is that medium to small businesses and large corporations with many branches such as distributors have been slow in taking appropriate measures and there is no framework or organization to satisfactorily provide occupational health services to the sectors employing a large number of workers. The development of agencies capable of providing services to this sector is obviously extremely important as shown in Fig. 2 in the framework of collaboration (Fig. 2).

Education and training of OHS professionals

The human resources required by such an agency are a related issue. There are several levels of specialization among occupational physicians but both corporate and outside occupational health agencies require physicians with a high skill level. One of the primary purposes of universities for occupational health and medicine should be to train such resources and ensure that they receive appropriate recognition for their level of skill. It will be important for corporate and outside occupational health agencies to actively recruit medical specialists as experts who have the requisite skills to win the trust of society and who can be used to appeal to the public. Agencies providing services to small and medium scale businesses and workplaces in particular will need a framework for accumulating and exploiting skills and ability that will enhance the effectiveness of occupational health services. This will be more meaningful to ordinary citizens than just a list of registered occupational physicians. It will therefore be necessary to train human resources with a high level of expertise and to promote *de facto* rather than *de jure* social recognition. It is anticipated that agencies will provide a venue for the practical training of such human resources.

Role of outside occupational health agencies (service providers)

The role of outside occupational health agencies in supplying human resources and outsourcing health management, professional work and services for employees of medium to small-scale businesses is expected to become increasingly important. Independent agencies and offices with teams of occupational health professionals are expected to develop in Japan as well and they will also likely serve as agencies for training human resources. As health checkups are but one form of occupational health activity, the perception that occupational health services and the status of occupational physicians are mere accessories to health checkup service orders should be corrected.

Due to the current shortage in physicians conducting health examinations, which stems from a series of changes following designation of clinical training as compulsory by health examination agencies, this departure from the original positioning focused on the health assessment activities by such organizations as the National Federation of Industrial Health Organization is urgently required. For example, in case of UOEH graduates, assessment of adequacy must be based on the actual content of the activities undertaken by individual graduates. To avoid misunderstanding, however, it must be pointed out that this proposal differs from that of agencies that provide scholarships.

Conclusion: Proposals based on this study

Proposals for the way that the occupational health should be in the future have been prepared from this study as presented above. These proposals have been finally prepared from repeated discussions with researchers who shared this study with this author and research cooperators about the results of this study titled "A Study on the Way that the Occupational Health Should Be in the Future". Proposals presented in the reports of individual research groups were included in the comprehensive proposals as shown in the Appendix.

Acknowledgement

This study was performed by the Science Research Fund from Ministry of Health, Labour and Welfare from 2001–2004. I would like to express appreciation to the researchers listed below for the contribution to this study.

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Hisanori Hiro (Adecco Ltd.)
Katsuya Furuki (Odachi Clinic)
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Toshiaki Miyamoto (Nippon Steel Corporation)
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Appendix: Proposals based on the study

Proposal 1. Duties of occupational physicians

The core work of occupational health is to reduce health risks in workplaces, and the core service in the work of occupational physicians is the diagnosis of employees for their management in the workplace and for their return to the workplace. In order to accomplish these works, the ten items given below are needed as duties of the occupational physician.

Especially, as new duties the occupational physician is required to address countermeasures against terrorism, influx of infections from overseas, and environmental problems. From the viewpoint of ensuring the protection of personal information that has surfaced as a social problem in recent years, the occupational physicians are required to perform their work with responsibility for information management as one of the duties of dealing with the important personal information of results of health examinations.

1) Medical examinations and subsequent management
2) Workplace inspections (comprehension of the present situation of the workplace)
3) Health Committee and Occupational Health Committee
4) Health education and occupational health education
5) Personal interviews (occupational health guidance, health education, health consultation, etc.)
6) Mental health management
7) Overwork management
8) How to cope with industrial accidents and health impact investigations
9) Health and health crisis management (crisis management)
10) Health-related information management

Proposal 2. How to provide occupational health services and occupational physicians' services

The minimum standard of the present laws stipulates that a business office with 50 or more employees shall select an occupational physician and a health supervisor, and the number of workers who are subjected to the occupational health services and occupational physicians' services is only about 42% or so of the whole number of workers. However, the occupational health services are not only required by large-size enterprises, but also these occupational health activities should be provided to all workers. The author of this study proposes the following items for deploying the occupational health services for all workers in consideration of economic burdens for taking the occupational health services and economic conditions of business offices:

1) The obligatory regulation to submit a report of results of periodic medical examinations should be revised to expand the obligation from business offices each with 50 or more employees under the present ordinance to business offices each with 30 or more employees.
2) The obligatory regulation to select a health supervisor should be revised to expand the obligation from business offices each with 50 or more employees under the present ordinance to business offices each with 30 or more employees.
3) The obligatory regulation to select an occupational physician should be revised to expand the obligation from business offices each with 50 or more employees under the present ordinance to business offices each with 30 or more employees.

   The above revision will make it possible to cover about 54% or so of all workers. After observing the spreading of the occupational health services by the above standard, the author of this study proposes the following for deploying the occupational health services for further workers.
4) The occupational health services provided by the occupational physicians should be obliged to cover all workers.

On the next stage of the obligatory standard for business offices, the occupational health services should be provided to all the workers by occupational physicians. Concerning the standard of providing services, the basic time for providing the services per worker should be 20 min a year and an additional time for providing the services to a worker should be specified depending on the worker's exposure to hazardous materials or being engaged in dangerous work. The author also proposes that when there is a nurse as a staff member for the occupational health services in a business office, the services provided by an occupational physician should be reduced accordingly, and the amount of services provided by the nurse should be converted into the amount of the services provided by the occupational physician.

Proposal 3. Providers of occupational health service and occupational physicians' services

The occupational physicians provide most of the present occupational health services. In enterprises with 1,000 or more workers, a physician is employed as a full-time occupational physician. In other enterprises with fewer workers, however, a physician is employed as a part-time occupational physician for providing the medical services.

The most of the part-time occupational physicians are employed by ordinary medical-care institutes, and others are employed by health examination institutions, outside health and safety agencies, or universities and research institutions. Furthermore, there are some cases where they work as independent part-time occupational physicians or provide their independent services as occupational health consultants. In order to support part-time occupational physicians who form a majority of the occupational physicians and to make them provide more reinforced occupational health activities to more workers, the author of this study proposes the following:

1) Reinforcement of outside occupational health agencies

In occupational health institutions, in addition to an occupational physician, occupational health nurses, nutritionists, and sports instructors are staffed as providers of the services, and total services are provided in organic combination of those individual specialist personnel, with the desirable quality of service retained. The specialty and uniqueness of the activity and staff are raised through these activities, leading to a good circulation of producing next request. Moreover, there are many outside medical examination institutions through the country, and these institutes already enjoy reliable relations with enterprises. An increase in the outside medical examination institutes can be expected to deploy occupational health services to a wider range of workers for the future.

2) Fostering occupational health consultant firms

It has been found here and there that young occupational physicians become independent as occupational health consultants and start their activities. It is expected that independent specialists will increase, and this will lead to building up a servicing base with a core of these young occupational physicians, where they will be able to cooperate with other occupations. Like a law firm for lawyers, the young occupational physicians will grow into as specialists. It will be necessary to found a service base that should be called "occupational health consultant firm" to steadily respond to demand for services in a district. Such occupational health consultant firm can be valuable resources for occupational health services in the district.

3) Development of an institute of occupational safety and health

At present, with regard to occupational health services, there are a variety of service providers, service organizations, and service offices, resulting in confusing business offices. An "institutions of occupational safety and health" should be developed as an arranged office of occupational safety and health to clarify an office to be consulted by enterprises, to effectively provide services, and to clearly show the existence of services to be provided.

The Institute of Occupational safety and health not only plays the role of a consultation office but also forms networks with existing organizations including prefectural occupational health promotion centers, regional occupational health centers, labor standards association, outside occupational health institutions, medical examination institutions, and chambers of commerce and industry. This institute will also prepare a variety of reports and notifications in behalf of the workers.

4) Support of activities by authorized occupational physicians in the field

Since the providing of occupational health services for business offices with small members is hard to be carried out on a commercial base, it will be realistic that the physicians in the field with an viewpoint of occupational health and the mind of an occupational physician is involved in providing the occupational health services. Because the sector of risk assessment needs special knowledge and technique in many points, it is indispensable to cooperate with other specialists. Information and training opportunities should be provided, and a consulting office (for offering resources information, activity know-how, coordination functions, etc.) should be designated, so that the practice physician can perform risk assessment and address special problems.

5) Expanding of joint selection of occupational physicians

5)-1 Increase of subsidy

5)-2 Extending of a period of subsidy to five years

Business owners and workers expect the occupational health staff to provide many services to keep the employees' health. Many business owners and workers, however, point out an increase in a burden of cost as a problem for occupational health activities. The system should be revised as mentioned above to lighten the economic burden of the business office and provide occupational physicians and occupational health activities to as many workers as possible.

6) License to new entry into occupational health undertaking

Not a few business owners and workers think that they have no room for increasing personnel for implementing occupational health activities in their workplace. Special knowledge and techniques are frequently needed for

occupational health activities, and therefore lack of services is considered to be due to shortage of personnel. In order to solve these problems, private enterprises and NPO organizations should be licensed to enter these service sectors, so that they will execute the occupational health activities for the authorized occupational health bodies and physicians. Thus, human resources relating to safety and health should be utilized. At present, prefectural occupational health promotion centers alone carry out the joint selection of industrial physicians as one of their exclusive undertakings, but we think that the liberation of these undertakings to the private sector will ensure more enhanced occupational health activities.

Proposal 4. Introduction of new report system

The nucleus of the occupational health activities is a business operator. Therefore, it is indispensable for upgrading and expanding the occupational health activities that the business office itself should vigorously carry out and continue its activities. For promoting the voluntary industrial health activities and understanding the basic data contributing to the activities, we propose the following:

1) Establishment of the obligation to submit reports on risk evaluation and improvement measures

1)-1. All business offices should independently implement diagnosing their workplace every year, identify and evaluate risks to the employees' health in the same way as the case of risk to their safety, and prepare a report of "risk evaluation and improvement management" on how the business office has conducted their occupational health activities and management for decreasing the risks pointed out in the past (risk management).

1)-2. Business offices each with 10 or more employees should be obliged to prepare and submit a report of "risk evaluation and improvement management" to the Labour Standards Inspection Office. The reason why "business offices with 10 or more employees" is that such business offices have selected health or hygiene promoters in their workplaces. The business operator, the occupational health promoter or hygiene promoter should prepare the report.

1)-3. The administration agency should prepare a basic form of report of "risk evaluation and improvement management." In business offices with 50 or more employees, the occupational physician or the occupational health consultant and the hygiene controller should sign the report before it is submitted.

The business operator and workers themselves should promote their own occupational health activities for lightening health risks in the workplace, so that workers can work comfortably and healthily. We think that the introduction of new regulations mentioned above will be effective for raising the business operator's comprehensive consciousness of safety and health, checking everyday occupational health activities, spreading and promoting of occupational health management system, and contributing to the safety and health supervising administration including periodic supervision.

2) Establishment of the obligation to prepare a report on results of medical examinations in all sizes of business offices

An implementation rate of periodic medical examinations in small-sized business offices remains about 70%: the smaller the size the business office, the lower the implementation rate. However, both business operators and workers point out the spreading of lifestyle-related diseases at a high rate as an anxiety for the health control of workers. Under the present laws, business offices which employ 50 or more workers at all times are only obligated to report to the competent Labour Standards Inspection Office about results of periodic health examinations and medical inspections of employees engaged in specific jobs. It is necessary, therefore, that the obligation to report on the results of medical examinations should be established in all sizes of business offices, in order to collect basic data for health control and promote periodic health examinations in small-sized business offices.

Proposal 5. Introduction of a merit system into business offices in establishment of a new system

The merit system of the worker's accident compensation insurance aims at raising the incentive of business operators to preventing labor disasters. In this insurance system the payment of a labour insurance premium is reduced when industrial accidents have decreased, and inversely the payment of a labor insurance premium is increased when industrial accidents/work-related accidents have increased. At present, the measures for safety and health to which this merit system applies are limited to those for forming a comfortable environment for working. It is clear that a reinforced occupational health management is effective for preventing industrial accidents/work-related accidents, and it is also indispensable for the business operators to reduce their economic burden in order to perform a wide range of reinforced occupational health activities under their motivated consciousness.

1) The implementation of occupational health activities should be added to the application of the special merit system of the worker's accident compensation insurance.

(i) In accordance with the Kihatsu No. 619 of September 9, 1997 issued by the Ministry of Labor "Implementation of Promoting Occupational Health Activity Support for Small-size Business Offices," a business office of the group that made an application for a subsidy to Japan Labor Health and Welfare Organization (a prefectural occupational health promotion center) shall make out and implement "A plan for promoting occupational health activities" that meets the requirements of (ii) and (iii) below.

(ii) The plan shall include one or more of the following health activities:

A. Holding of a health committee
B. Implementing of health and hygiene patrols
C. Holding of a review meeting on disaster cases
D. Implementing of risk prediction
E. Holding of a safety and health meeting, or participation in it
F. Holding of a seminar on prevention of traffic disasters, or participation in it

(iii) The business office shall implement six or more of the following occupational health activities (the activities of A to E shall be certainly included).

A. Implementing of medical examinations, and raising a rate of taking medical examinations
B. Patrols in workplaces
C. Health education and consultation based on the result of medical examination
E. Hygiene education
F. Overwork management
G. Holding of a hygiene committee
H. Measurement of work environment
I. Improvement of work environment
J. Improvement of hygienic aspects, and proposal of ideas
K. Improvement of hygienic facilities
L. New procurement of hygienic protection tools, and inspection and maintenance of them
M. Management of harmful work
N. Implementing of gymnastics at work and sports athletics
O. Mental health management

We think that the obligation of reports on the above activities will lead to expanding substantial occupational health activities.

2) The application of the special merit system of the worker's accident compensation insurance shall be revised to read from "a continuous business that meets the conditions of [the number of workers $\geq 0.4 \times$ premium of work-related accidents/industrial accidents] in an enterprise (working unit) with 20 or more to 100 or less employees" to "every enterprise (working unit) with 20 or more to 100 or less employees."

The special merit system of the workers' compensation insurance is infrequently applied to small-scale business offices because the business office must be a continuous business meeting the above conditions. Since a reduction in the scale of business office is now seen, the above proposal is necessarily adopted to deploy more reinforced occupational health activities.

3) The period of applying the special system of the workers' compensation insurance should be prolonged from three years to five years. Also, this special system should be also applied to the construction industry.

We think that the period of application for three years under the present laws is insufficient for the business office to understand and deploy the continuing occupational health activities. It will need five years of the application period to make the business office and operator to understand the spirit of the system and establish the base for continuously implementing the occupational health activities. Furthermore, since one third of the business offices that jointly select occupational physicians belong to the construction industry, the construction business should be included in the application of the above special merit system.

Proposal 6. Ensuring of international coordination

In the Anglo-Saxon type, the point of emphasis in the occupational health activities is moving to how it should be positioned in the business management, and in the type of North Europe, France and Germany, the providing of occupational health services is the obligation of enterprises as a social responsibility. The Japanese system lies midway between those two types. Even if each country adopts its own occupational health system suitable for the country's culture and establishment, many of the main tasks are common among the systems of individual countries, including increase in working ability, health enhancement, proper placement, measures against infectious diseases, crisis management, mental health management, overwork, and young workers. In order to promote the solving of these common problems and protect the health of workers in the world, we propose as follows:

1) Harmonization of standards of individual countries for labor safety and health
2) Necessity to develop capable people who respond to independent management
3) Ensuring of international agreement to high-level specialist qualifications
4) Mutual recognition of qualifications of occupational physician, nurse, labor hygienist, ergonomist, and counselor
5) Ensuring of international coordination of education and training curriculums for high-level specialist qualifications
6) Preparation of guidelines for occupations relating to occupational health businesses

Axis 認定産業医❶

これからの産業保健、産業医に期待される職務

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1 背景

技術発展、国際競争という経済活動の変化に伴って、裁量労働制の拡大、深夜業の増加、小規模分散事業所の増加、SOHO（small office home office）、テレワークなどの雇用形態・労働形態の多様化が進み、少子高齢化に伴う労働者の高齢化、より一層の女性の職場への進出、海外からの労働力移入などが生じてきている。働く人の健康を支える産業保健に関わる課題も、広く、また重要性を増してきている（表1）。国際的には予防医学の実践とされる産業医・産業保健職に求められる機能、技能の範囲、ウェイトも必然的に変化する。

ここでは、「今後の産業保健のあり方に関する研究（平成14～16年度厚生労働科学研究）」の成果を基に、産業医が関わる業務、サービスの将来像について展望する。

2 産業保健業務の範囲

わが国の産業保健制度は産業医制度を中心とした仕組みになっている。産業保健に求められる機能は、裏返せば専門職が具備すべき技能と考えられる。現行法規では、「産業医及び産業歯科医の職務等」には以下のようなものがある。つまり、「一 健康診断の実施及びその結果に基づく労働者の健康を保持するための措置に関すること、二 作業環境の維持管理に関すること、三 作業の管理に関すること、四 前三号に掲げるもののほか、労働者の健康管理に関すること、五 健康教育、健康相談その他労働者の健康の保持増進を図るための措置に関すること、六 衛生教育に関すること、七 労働者の健康障害の原因の調査及び再発防止のための措置に関すること」である。

「今後の産業保健のあり方に関する研究」[1]でまとめた産業保健サービスの範囲では、クライシスマネジメント（危機管理）、労働安全マネジメントシステム（OSHMS）の導入と推進に関わる業務、メンタルヘルス対策、過重労働対策へのより一層の関与、生産性への寄与をも念頭に置いた新たな健康増進対策、高年齢労働者対策、母性保護への対応といったことへの産業医の関与が挙げられている。

3 新たな分野：クライシスマネジメント

化学物質、生物兵器などによるテロ対策も、企業労働者がその危険にさらされるものであれば、重要な産業保健業務の一端となる。技術的には天災、大事故などの災害や感染症への対策と共通のものがある。医療職としてのトリアージ、救急治療、現場管理の技能習得ならびに関係者・スタッフへの必要な教育などがある。

また、企業がその活動の中で使用あるいは取り扱う化学物質などについては、廃棄物を含めて、その十分な安全管理が労働者あるいは環境に対し求められる。この実施に当たっては知識・技能両面での専門職の関与が期待される。

企業のクライシスマネジメントで、産業医・産業保健部門が関与すべき内容のガイドライン（生物化学的脅威に対する対策として、企業内あるいは地域の産業保健組織が整備すべき装備、マニュアル、情報伝達システム、人材育成など）の整備が今後とも必要となる。

4 重点分野：メンタルヘルス、過重労働対策など

企業内のみならず社会全体にストレスの増加が示されている。社

会の基盤である生産人口の健康保持対策において、メンタルヘルス対策、過重労働対策はきわめて重要である。産業医による労働時間に基づく面談実施の義務化と、産業医からの意見聴取に基づく事業者の対策・対応の義務化などについては平成17年に法制化された。産業保健職の権限ならびに適正な処遇がないまま、責任のみが負荷されることへの警戒はあるが、社会の期待を受けた改正と考える。

健康問題については労使の関心が高く、また、〝職域での対応が必要〟とする意識の一致度も高く、今後も生活習慣病対策を含む健康増進は重要度を増す。欧州では、生産性への寄与や国民全体の高齢社会対策の一つとして、エビデンスに基づいて労働人口における健康増進の意義を認め、推進する動きが高まっている。

わが国では、いち早く政策的にも導入された「心と身体の健康づくり」(total health promotion plan：THP)がやや下火になっているが、この推進は、産業保健の分野を超えても重要なことに変わりはない。健康指標の開発、健康情報の活用による効果の評価、テーラーメードのメニュー提供を可能とする企業内外の資源整備などが期待されている。

高年齢労働者対策、母性保護については、企業の社会的責任(corporate social responsibility：CSR)に関わるものとする認識もある。現在先進国の中で最も早い少子高齢化を迎えるわが国においては、社会経済基盤を維持する上でも最重要課題となる。こうした雇用を維持する上で、就労者とその家族の健康保持は安心の基本の一つであり、産業保健における課題としても重要度は高くなろう。

5 労働安全衛生マネジメントシステム

ＯＳＨＭＳの導入は、自主的あるいは自律的管理を行うために必要な過程と認識されている。職場の危険有害要因によるリスクの評価(リスクアセスメント)の段階や、緊急時の対応を含む有効な対策の提示において、産業保健専門職の関与は重要と考えられる。

ＯＳＨＭＳの意義ある活用においては、関与する者における、危険や実施している行為についての理解、常に問題点に気づき改善す

表1　産業保健に関連する現在の課題

1. 企業の社会的責任(CSR)
   企業・団体の健康組織化，環境負荷の軽減志向
2. 海外展開の産業保健上の課題
   感染症対策と危機管理，「グローバルリスク」と「ローカルリスク」
3. メンタルヘルス対策・過重労働対策
   成果主義の拡大，競争激化，過労死・精神疾患・労災増加，雇用形態の多様化
4. 労働安全衛生マネジメントシステムと既成の産業保健活動との調和
5. 産業保健専門職の資格・研修教育の国際的ハーモナイゼーション
6. 産業保健サービス提供システムの充実
7. 情報活用と情報管理システムの多面的整備
8. すべての働く人への産業保健サービスの提供の方法

表2　産業保健サービス充実のための具体的提案

1. すべての働く人へ産業保健活動を提供するため，全労働者への産業医・産業保健サービス提供を義務化する
2. 定期健康診断結果の報告義務を現行法規の50人以上の事業場から，30人以上の事業場へと改正する
3. 産業医選任義務を現行法規の50人以上の事業場から，30人以上の事業場へと改正する．この基準の改正よって，全労働者の54%程度を対象とすることができる
4. 企業外労働衛生機関の充実：労働衛生機関が，サービス提供者として，産業医に加え，産業看護職や栄養士・運動指導者をスタッフとして揃え，各専門職によるサービスを有機的に結びつけたトータルサービスを提供する
5. 産業保健コンサルタントファームの醸成：弁護士における弁護士事務所と同様に，専門家として成長しつつ，安定的に地域のサービス需要に応える産業保健コンサルタントファームと呼ぶべきサービス拠点設立の促進
6. 実地医家である認定産業医の活動支援：実地医家がリスクアセスメントなど，専門的問題への対応を果たすため，情報提供や研修機会の提供，相談窓口(リソース情報，活動のノウハウ提示，コーディネート機能等)の明確化

べく考える能力が求められる。この教育、医療関連業務の実践指導で産業医の関与はより重要度を増す。嘱託産業医が活躍する中小規模の事業場では、OSHMSへの取り組みはこれからであり、特に、安全に偏っていて健康・保健の面では不十分なことが多い。成果をあげるのは現場の力にかかっているが、健康問題の専門職として実効ある指摘が期待される。

6 課題：産業保健サービスの提供手段

現在、企業規模や就労形態、さらには業種や地域で差がある産業保健サービスを、すべての働く人に適切に提供する仕組みをどのようにするかが課題である。

まず基本として、ドイツやフランスで実施されているように、労働者一人当たりのサービス時間を決めるという案がある。日本では、現在実施されているサービスの実情から概ね一人当たり20分程度が必要時間と考えられる。これは産業医が実際に使う時間としているが、他の産業保健スタッフとの連携により、必要なものにはより多くの、そうでないものにはより少ない時間でも、適切に提供する工夫もできる。

今後、合理的な産業保健サービスの提供のためには、社内機関、企業外労働衛生機関、医療機関・地域産業保健センターの他、専門家チームによるサービス提供機関の育成が必要と考える。こうした中で、産業医には、地域の実情に合わせて、健診機関、作業環境測定機関、医療機関や検査・研究機関を活用する、コーディネーターあるいはコンダクターの資質も求められると思う。

以上に関連して、表2のような具体的提言(抜粋)を上記報告書[1]では行っている。

現行法規の最低基準では、産業医の選任、衛生管理者の選任は、事業所規模50人以上となっており、この基準による産業保健活動、産業医活動の対象は、全労働者数の42%程度のみとなっている。産業保健活動は、事業所規模の大きな企業に対してのみ必要なわけではなく、すべての働く人々へ提供する必要がある。産業保健活動を受けるための経済的負担と事業所の経済的状況を考慮しなければならないが、このための提言である。

7 国際的整合性確保の流れ

産業保健の形は、経営の中でいかに産業保健活動を位置づけるかに重点が移りつつあるアングロサクソン型と、企業への社会的責任として義務化している北欧、フランス、ドイツなどの産業保健提供形式があり、日本の制度はこの中間に位置している。それぞれの国の文化・制度に合わせた労働衛生体制となっているが、産業保健の課題としては、就労能力の向上、健康増進、適正配置、感染症対策、危機管理、メンタルヘルス対策、過重労働、若年労働者と、主要課題は共通するものも多い。

これら共通する問題の解決を推進し、全世界の働く人々の健康を守るため、①労働安全衛生に関わる各国の基準の調和、②自主的管理に対応した人材育成の必要性、③高次専門家資格の国際的対応の確保、④産業医、看護職、労働衛生士、エルゴノミスト、カウンセラーの資格互換認定、⑤高次専門家資格の教育研修内容の国際的整合性の確保、⑥産業保健関連業務に関わるガイドラインの作成が課題となっている。

おわりに

産業医は、基本的な知識と広い見識を持って、また実際のコアサービスに必要な技能、機能を具備して業務を遂行する「専門家」とすることが時代の要請に適っていよう。その上で、それぞれの医師が背景に持つ臨床家としての専門性が、従業員の相談を受ける場合のメリハリとして生きてくる。あくまで、対人間へのサービスであることに産業保健の意義があり、また産業「医」の醍醐味がある。

「労働は最大の健康要因」という。働く人の健康確保・増進を支援する産業医の職務は、医師にとって、知れば知るほどやりがいのある仕事になるのではないだろうか。

▼▼▼文　献▼▼▼

1) 平成14～16年度厚生労働科学研究「今後の産業保健のあり方に関する研究（主任研究者：東　敏昭）」総括報告書, 2005.

Effects of Web-System and Diet-Supporting Foods on Body Weight Reduction

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Objective

This study was initiated to examine the effects of a body weight reduction program by use of internet system and diet-supporting foods on obese subjects.

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Methods 1

- Subjects:
  - 741 obese people [BMI>25kg/m^2; 567 men and 174 women; mean age=41.4 years (men, 40.8 years; women, 40.8 years)]
- Duration of the study
  - From 24 Oct. 2005 to 18 Dec. 2005 (8 weeks)
- Instruction to the subjects
  - Measure body weight daily and write it in the Health Notebook on Website
  - Take diet-supporting foods (170 Cal/meal) once a day in place of a regular meal
- The subject can use Internet Blog system to check his/her daily life and to encourage each other

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Methods 2

- All participants were randomly assigned to three groups for investigation of supporting approach
  - Group 1: with automatic health advice by e-mail
  - Group 2: with person-to-person health advice by e-mail
  - Group 3: with no health advice
- Body weight, waist circumference, systolic and diastolic blood pressure (SBP and DBP), total cholesterol (TC), triglyceride (TG), HDL cholesterol (HDL-C), LDL cholesterol (LDL-C) and blood glucose were measured before and after the period

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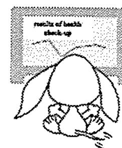
What are the health supports by Internet Blog system ? (1)

- To enable the subject to review results of health check-up
- To provide the subject health information



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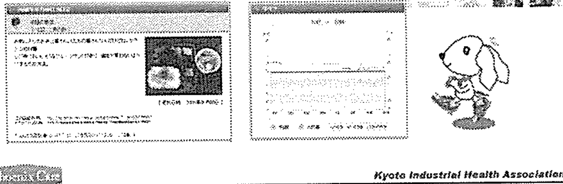
What are the health supports by Internet Blog system ? (2)

- Health Notebook on Website
  - diary
  - records of lifestyle (body weight, body fat percentage, exercise, diet)



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Results 1

Changes in the parameters before and after the body weight reduction program

	Diet Program (M±SD)			p-value
	Before	After		
Body weight	78.7±12.0	75.5±11.6	↓	<0.01
Waist circumference	94.1±8.6	90.2±8.5	↓	<0.01
SBP	127.3±12.6	124.6±13.3	↓	<0.01
DBP	80.7±10.8	78.9±10.3	↓	<0.01
TC	210.9±34.4	198.5±34.2	↓	<0.01
TG	172.9±117.9	135.5±100.5	↓	<0.01
HDL-C	52.8±14.4	55.2±15.0	↑	<0.01
LDL-C	118.3±27.1	113.9±28.0	↓	<0.01
Blood glucose	99.5±21.7	96.7±19.5	↓	<0.01

n=741

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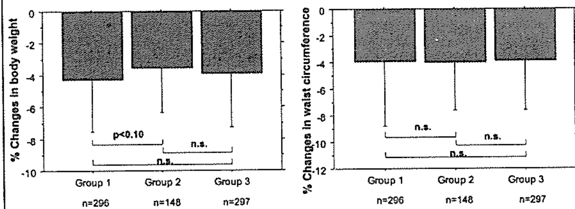
Results 2

Changes in body weight and waist circumference before and after the body weight reduction program in each group



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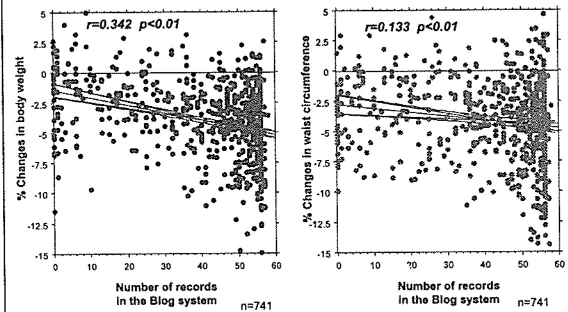
Results 3

Relationship between the number of records in the Blog system and % changes of body weight and waist circumference



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Conclusion

The eight-week program by use of internet system and diet-supporting foods succeeded to reduce body weight, accompanied by the improvement of other medical parameters.

Blog system might represent a new strategy for improvement of obesity and obesity related diseases.

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