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<p>シリーズ 64 「健康教育をささえる」～養護教諭の現場から～</p> <p>小・中学校が連携して進める学校保健活動～成長曲線の活用を通して～</p> <p>山梨県 身延町立身延清稜小学校 養護教諭 有野 久美</p> <p>1. はじめに</p> <p>平成 26 年 4 月 30 日付け学校保健安全法の一部改正を受け、「平成 28 年度からの健康診断はどうしようか」と一抹の不安を感じつつ、仲間とともに通知や資料を読み込み、様々な研修会を通して改正のねらい等をまず理解することから始めた。具体的なイメージがなかなかまとまらず悩んだが、その後日本学校保健会から届いた『児童生徒等の健康診断マニュアル』が手掛かりとなった。このマニュアルをもとに町内小中学校の養護諭や関係者と協議を重ね、本町の実態を踏まえた健康診断を進めることができた。校長会、町教育委員会の助言と協力のおかげでもある。加えて、本町はここ数年間で小中学校の統廃合が進められている。学校が変わり進学しても、子供や保護者が安心できる学校保健活動を目指し、連携した取組を進めてきた。その中から「身長成長曲線、体重成長曲線、肥満度曲線」（以下、成長曲線等）の活用を通じた取組の一部を報告する。</p>	<p>Series 64 “Supporting health education” —From the site of practice of nursing teachers (YOGO teachers)</p> <p>School Health Activities jointly linked and promoted between elementary and junior high schools: Deploying growth curves Kumi Arino, nursing teacher (YOGO teacher), Minobu Seiryō Elementary School, Minobu Town, Yamanashi Prefecture</p> <p>1. Introduction I had a continual and vague feeling of anxiety as to “what should be done about health checkups from FY 2016,” taking on the partial revision of the School Health and Safety Act on April 30, 2014. I read through the relevant notifications and reference materials with my compatriots, and began to comprehend the purpose of the revisions through various training sessions. While I remained anxious that a specific vision was failing to coalesce, subsequently the “Manual for health checkups for school children, etc.” which arrived from the Japan Society of School Health helped me get a handle on this. I was able to use this manual as the basis for various discussions with nursing teachers (YOGO teachers) and other relevant persons in elementary and junior high schools in the town in order to progress in provisions for health checkups based on our town’s actual circumstances. This progress can also be attributed to the advice and cooperation of the association of principals and the town’s board of education. In addition, in the past several years the merger of elementary and junior high schools has been ongoing. We have joined forces to further initiatives for school health activities to allow children and guardians ease of mind even as they change schools and advance school years. I will report on some of such initiatives which use “Height growth curves, weight</p>

2. 「子供の健康管理プログラム」の活用に向けた取組

(1) 必要事項の入力

平成 28 年度の健康診断に向け、前年度の秋から、「子供の健康管理プログラム」(以下、プログラム)の Excel 原票へ、小学校入学時からの身長体重の値等の必要事項の入力を行った。中学生の場合、最長 9 年間の測定値の入力になるので、町内の養護教諭で連携し随時入力を行った。測定値の入力数は、年 1 回、年 3 回、年 10 回で成長曲線等を作成し、グラフの見やすさを比較し、小児内分泌の専門医の助言を得て、原則年 3 回の入力とした。

(2) 成長曲線等に関する啓発

以前は、身体測定値を一つ一つプロットして作成するため、成長曲線等の作成は成長が気になる子供のみであった。しかし、プログラムの活用で全員分を効率的に作成でき、資料として示すことが可能になった。その分、それを手にする保護者や学級担任との共通理解をもつためには、成長曲線についての理解が必要となった。そこで、職員会議や保護者対象の資料(資料①)を作成し、平成 27 年度から、繰り返し

growth curves and the percentage of overweight curve” (hereinafter, these are called “Growth Curves”).

2. Initiatives towards deployment of “Children’s Health Management Program”

(1) Input of necessary items

In preparation for the FY 2016 health checkups, we began to input the necessary items such as height and weight values from the time students entered elementary school, into the “Children’s Health Management Program in a prescribed format Excel sheet from autumn of the previous fiscal year. For junior high school students, we regularly liaised with nursing teachers (YOGO teachers) in the town and input their details to encapsulate measurement values for a maximum length of nine years. We created Growth Curves, etc. for once, three times and ten times yearly with input figures for measurement values, and compared the appearance of these graphs. We then decided in principle to input items three times per year under the guidance of a certified medical specialist in pediatric endocrinology.

(2) Awareness-raising activities on Growth Curves, etc.

Previously we had only created Growth Curves, etc. of the height measurement values for children whose growth was in some way concerning, in order to plot one by one and draft body measurement values. However, by actively deploying the Program we were able to efficiently create these for all school children, facilitating the presentation of these resources. In order to allow the guardians and homeroom teachers who are to handle these resources to share a common understanding of them, their understanding of the Growth Curves was required. With this in mind we

返し啓発を行ってきた。平成 28 年度にも、PTA 総会、学校保健委員会等の機会に説明を重ねた。併せて、改正の内容をまとめた資料を作成し、町教育委員会を通して学校医に協力依頼をお願いした。

(3) 学校医が行う健康診断での活用

学校医が行う健康診断での活用には、事前の準備が重要となる。プログラムの検索で成長異常群に該当した子供の対応は、町内の学校で統一した。新年度の身体測定値を入力し、作成した成長曲線等を診察前に学

校医に提示する資料に含めた。学校医からは、診察時の問診、診察結果を踏まえて、今後の対応について個別に指導していただいた。健康診断改正の趣旨や内容について事前に理解していただいたことから、診察時

に「運動する時、痛みがあったり、気になったりするところはあるかな」「好き嫌いなく食べているかな」等、ていねいな問診、診察を進めていただけた。

(4) 健康診断の事後指導として

プログラムで成長異常群のうち検索 2・4・5・7・9 のグループに該

created materials for teachers meetings and the reference of guardians, again undertaking Awareness-raising activities from FY 2015. In FY 2016, we offered further explanations on the occasion of the PTA general meeting and meetings of the School Health Board. At the same time, we created materials which summarized the content of the revisions and requested cooperation from school doctors through the town's board of education.

(3) Deployment in health checkups conducted by school doctors

Advance preparations are important to deploy health checkups conducted by school doctors. We standardized the response for children classified as having growth abnormalities through retrieval from the Program for the schools in the town. We input body measurement values for the new fiscal year into the Growth Carves, etc. and included these measurements in materials presented to school doctors in advance of medical consultations. We had school doctors offer individual guidance on ongoing responses based on medical consultation content and the outcome of the medical examinations. As we had gained an understanding of the nature and content of revisions to health checkups in advance, we were able to facilitate scrupulous questioning as part of medical consultations and medical consultation. Questions included "Do you have any pain or other concerns when you exercise?" and "Are you a fussy eater?"

(4) Follow-up guidance after health checkups

For children falling under the retrieved groups 2, 4, 5, 7, and 9, classified as having growth abnormalities under the Program, we recommended

当した子供については、学校医の指導を踏まえ、専門医への相談受診を勧めた。その際、通知だけでなく、成長曲線等で読み取れる内容を含め、個別の面談や健康相談を行う等ていねいな対応を心がけた。

併せて、すべての子供の発育の評価として成長曲線等を家庭へ通知した。その中で、成長異常群に該当する子供にむけては、成長曲線等のグラフ上に生活指導を含めたコメントを加えた。成長曲線等の通知は、個別指導を除き身体測定毎の年3回としている。

(5) 学校の統合や中学校への引継に関わって

町内のそれぞれの学校での対応や成長異常群に該当する子供の受診状況とその後の経過を記録する様式を統一し、統合や進学時の引き継ぎ資料の一つとした。(表1) これにより、受診の有無、受診結果だけでなく、その後の経過や対応を確実に引き継ぐことができ、一貫した対応が可能になった。さらに、定期的に町内小中学校の養護教諭で事例検討を行うこともできた。

(6) 個別指導の資料としての活用

成長曲線等は、視覚的にわかりやすいグラフのため、指導資料として効果的に活用することができる。本校を例にとると、6年生には個

undergoing medical consultations with certified medical specialists based on the instruction of school doctors. On such occasions, we endeavored to complete scrupulous response actions, including the use of individual interviews and health consultation encompassing the content discerned from Growth Curves, etc.

At the same time, we notified children's households on Growth Curves, etc. as assessments of all children's development. As part of these notifications, we appended comments, including lifestyle advice based on the Growth Curve, etc. graph for children classified as having growth abnormalities. Notifications of Growth Curves, etc. for body measurements are rolled out three times per year excluding discrete provision of individual guidance.

(5) Involvement in school integration and handover to junior high schools

We standardized the form to record the actions taken at various schools in the town for examination status of children categorized as having growth abnormalities, and their subsequent progress. This allowed generation of materials to be handed over for integration and advancing years (Table 1). By doing this, it became possible to complete a reliable handover for subsequent progress rather than just offering statuses as to whether or not they had undergone examinations and the results of examinations, thus facilitating uniform responses. In addition, nursing teachers (YOGO teachers) at town elementary and junior high schools were able to routinely implement case studies.

(6) Deployment as materials for individual guidance

Growth Curves, etc. can be effectively deployed as instructional resources as they can easily be understood visually via graphs. Taking the example of Minobu Seiryō Elementary School, Growth Curves, etc. are presented

別に健康診断の振り返りを行う際に、成長曲線等を示し、そこからわかる発育の状況を説明し、生活習慣の振り返りを行った。子供の中に自らの身長伸びの見通しがわかり、早い就寝時刻を心がけ生活習慣を見直したり、次の身体測定を楽しみにしたりしている様子が伺うことができた。また、肥満ややせ傾向の子供に対しても、身体測定の回数を増やし、極端な体重の増減を目指すのではなく、成長曲線の基準線を参考に次回身体測定時の目標を理解するための資料として有効に活用できた。

when conducting individual reviews of health checkups among sixth year students. Information which can be derived from these as it relates to child development is explained and lifestyle habits are reviewed. We were able to observe the responses of children as they gained perspective on their own growth in height, and how they can make individual efforts to ensure that they maintain an early sleep schedule and review their lifestyle habits, while looking forward to the next time they will take their body measurements. In addition, we increased the frequency of body measurements for children tending towards obesity or thin body. We effectively deployed these measurements as resources to understand targets for subsequent measurements with reference to baseline values of growth curves, rather than aiming for extreme increases or decreases in weight.

表 1 プログラムによる成長異常群の対応状況一覧

中児 年齢	性別	名前	H28. 4		H28. 9		H29. 1		申し送り事項			
			分類 番号	受診 有無	結果と その後の対応	分類 番号	受診 有無	結果と その後の対応		分類 番号	受診 有無	結果と その後の対応
			⑥⑦	未		⑥⑦	未	給食の食べ方指導	⑥⑦	未	毎週の体重測定と生活の振り返り実施	保護者は受診の必要はない。
			⑥⑦	未	保護者と面談	⑥⑦	未	家庭で保護者とともに散歩を始めた	⑥⑦	受診	〇〇小児科定期受診中	
			⑥	受診	〇〇病院小児科 受診手帳骨のレントゲン撮影 乙のまま様子観察	⑥	未		⑥	未		
						⑩	受診	〇〇病院小児科受診 思春期早発症 対応なし				最大160CM 後半までの身長を前向きに受け入れて町外中学校進学
			④	未	〇〇病院小児科 定期受診中	④	受診	〇〇病院小児科 定期受診中	④⑩	受診	〇〇病院小児科 定期受診中	定期的に小児科受診、検査している。
						⑩	未	保護者と面談 毎月体重測定	⑩	未	保護者と面談 毎月体重測定・生活振り返り指導	家庭でも、食事のとり方をしている。

3. 成長曲線等の活用 1 年目の成果と課題

全ての子供の成長曲線等を保健管理・保健指導資料に活用すること

Table 1. List of response statuses for growth abnormalities under the program

School year	Number	Gender	Name	Apr. 2016			Sep. 2016			Jan. 2017			Handover items
				Sorting	Status	Outcome and subsequent actions taken	Sorting	Status	Outcome and subsequent actions taken	Sorting	Status	Outcome and subsequent actions taken	
				⑥ ⑦	Not yet		⑥ ⑦	Not yet	Guidance on how to eat school meals	⑥ ⑦	Not yet	Weekly weight measurement and review of lifestyle	Guardians do not believe in necessity to undergo medical consultation
				⑥ ⑦	Not yet	Interview with guardian	⑥ ⑦	Not yet	Began strolls with guardian at home	⑥ ⑦	Done	Having regular visits to Pediatrics, XX Hospital	
				⑤	Done	Saw a doctor at Pediatrics, XX Hospital X-ray taken of wrist bones Continued to monitor condition				⑤	Not yet		
							②	Done	Pediatrics Dept., XX Hospital Precocious puberty No action taken				Positively taking on board achievement of a height of up to a maximum of 165-170 cm. Advanced to junior high outside the town
				④	Not yet	Having regular visits to Pediatrics, XX Hospital	④	Done	Having regular visits to Pediatrics, XX Hospital	④ ⑧	Done	Having regular visits to Pediatrics, XX Hospital	Regularly hold pediatric medical examinations and checkups
							⑨	Not yet	Interview with guardian Monthly weight measurement	⑨	Not yet	Interview with guardian Instruction on monthly weight measurement/ review of lifestyle	Also making individual efforts on dietary habits at home

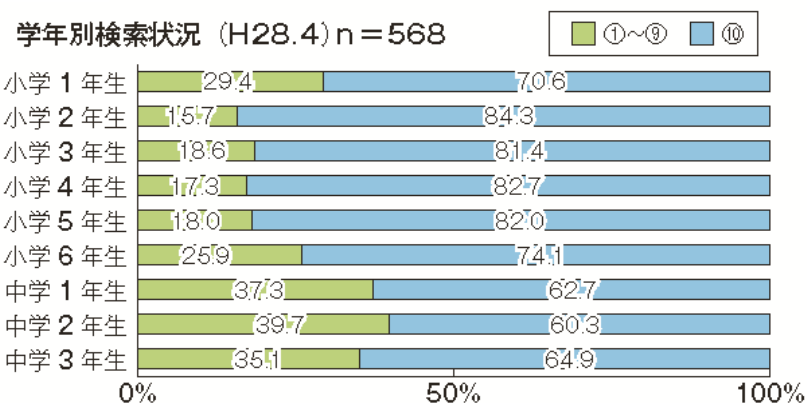
3. Outcomes and challenges from the first year of deployment of Growth Curves, etc.

By actively using the Growth Curves of all children in health management

で、見落としがちな男子の思春期早発症等の対応を行うこともできた。町内小中学校では、成長異常群の出現率は各学年で2～4割を占めた。(図1)特に中学生の検索グループ④、⑦の割合が高く、思春期早発症、進行性肥満が疑われる生徒が含まれている可能性がある。小学校での適切な対応により、今後この割合の減少を目指したい。

また、小学校入学後の身体測定値だけでは、小学校低学年の成長の評価は十分でない。今後は乳幼児期の状況の把握を考えていかなければならない。

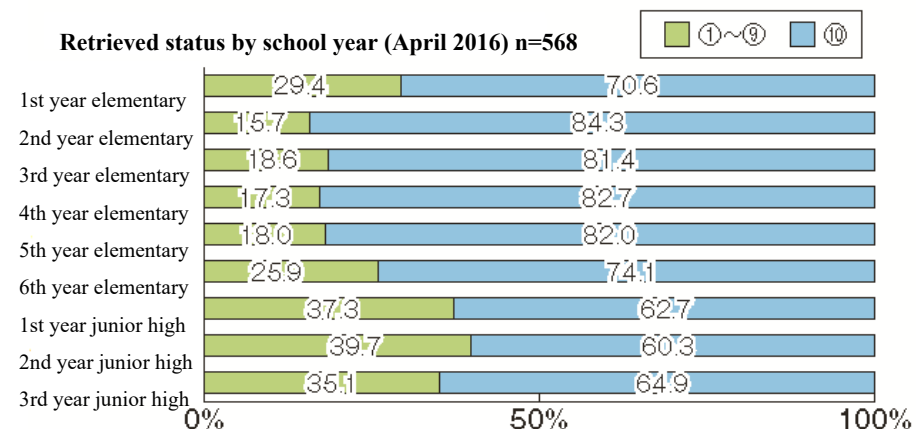
図1 プログラム検索による学年毎の成長異常群の出現率



and health guidance materials we were also able to take actions on precocious puberty in males which there is a tendency to overlook. The incidence rate of growth abnormalities in elementary and junior high schools in the town accounted for between 20% and 40% for respective school years (Figure 1). Rates were high in the retrieved groups ④ and ⑦ of junior high school in particular, and there may be a possibility that this includes students in whom delayed puberty or progressive obesity is suspected. We hope to decrease this percentage on an ongoing basis by means of appropriate responses in elementary schools.

In addition, only having body measurement values for entering elementary school, is insufficient to evaluate the growth of children in the lower grades of elementary school. Going forward, it will be necessary to consider obesity status from infancy.

Figure 1. The incidence rate of growth abnormalities from Program retrieval



4. おわりに

保健管理と保健教育を一体化させて学校保健活動を進めていく中で、成長の評価とその対応は健康づくりの基盤になることがより明確になった。今後も小・中学校で連携した取組を進め、健康教育の充実を進めていきたい。

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4. Conclusion

It has become increasingly clear in the course of integrating health management and health education and furthering school health activities that the assessment of child growth and actions taken in relation to such will become the foundation for promoting health. I hope that cooperative initiatives of elementary and junior high schools will continue to progress, and that health education will continue to be enriched.

Study compatriots

Noriko Shioya (Minobu Elementary School), Naomi Mochizuki (Minobu Junior High School), Hiroe Baba (Shimoyama Elementary School), Asuka Hikawa (Okouchi Elementary School), Kumi Arino (Minobu Seiryō Elementary School)